

2 0 0 6 / 2 0 0 7 : R e p o r t 7



OFFICE OF THE
Auditor General
of British Columbia

**Government's
Post-secondary Expansion —
*25,000 Seats by 2010***

December 2006

Library and Archives Canada Cataloguing in Publication Data

British Columbia. Office of the Auditor General.

Government's post-secondary expansion – 25,000 seats by 2010

ISBN 0-7726-5636-3

1. Higher education and state -- British Columbia.
2. Universities and colleges - British Columbia - Planning.
3. Postsecondary education - British Columbia - Finance.
4. College attendance - British Columbia - Planning.
5. British Columbia. Ministry of Advanced Education. I. Title.

LC176.2.B7B74 2006

378.711

C2006-960190-9



OFFICE OF THE
Auditor General
of British Columbia

LOCATION:

8 Bastion Square
Victoria, British Columbia
V8V 1X4

OFFICE HOURS:

Monday to Friday
8:30 a.m. – 4:30 p.m.

TELEPHONE:

250 387-6803
Toll free through Enquiry BC at: 1 800 663-7867
In Vancouver dial 660-2421

FAX: 250 387-1230

E-MAIL: bcauditor@bcauditor.com

WEBSITE:

This report and others are available at our website which also contains further information about the Office: www.bcauditor.com

REPRODUCING:

Information presented here is the intellectual property of the Auditor General of British Columbia and is copyright protected in right of the Crown. We invite readers to reproduce any material, asking only that they credit our Office with authorship when any information, results or recommendations are used.



OFFICE OF THE
Auditor General
of British Columbia

8 Bastion Square
Victoria, British Columbia
Canada V8V 1X4
Telephone: 250 387-6803
Facsimile: 250 387-1230
Website: <http://bcauditor.com>

The Honourable Bill Barisoff
Speaker of the Legislative Assembly
Province of British Columbia
Parliament Buildings
Victoria, British Columbia
V8V 1X4

Dear Sir:

I have the honour to transmit herewith to the Legislative Assembly of British Columbia my 2006/2007 Report 7: Government's Post-secondary Expansion — 25,000 Seats by 2010.

Arn van Iersel, CGA
Auditor General (Acting)
Victoria, British Columbia
December 2006

copy: Mr. E. George MacMinn, Q.C.
Clerk of the Legislative Assembly

Table of Contents

Auditor General's (Acting) Comments.....	1
Executive Summary.....	3
The 25,000 seat initiative is currently behind schedule	7
More effective and transparent allocation of the funds provided would help achieve the 25,000 seat growth objective	8
Institutions are planning and managing for growth, but need better human resource succession plans	10
Continual improvement in performance reporting on the expansion initiative would enhance transparency and accountability	11
Summary of Key Findings and Recommendations	12
Detailed Report.....	13
Background	15
Planning and Resourcing for Growth: Findings of the Ministry Audit.....	25
Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit	35
Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits.....	47
Management Response.....	49
Appendices	57
Appendix A: Original Student Full-time Equivalent Allocation Targets by Institution	59
Appendix B: Annual growth rate by post-secondary institution in British Columbia, 1996/97–2005/06.....	61
Appendix C: Summary of Reports	63

Auditor General's (Acting) Comments



Arn van Iersel, CGA
Auditor General (Acting)

This report presents the results of my Office's audit of the province's initiative to add 25,000 student seats to public post-secondary education institutions by 2010.

My Office chose to undertake this audit because post-secondary education plays a vital role in the economic and social well being of British Columbia. The provincial government has set as one of its five goals "to make BC the best-educated, most literate jurisdiction on the continent" —and increasing access to post-secondary education by adding more student seats is one initiative to achieve this goal.

In this audit, we examined the efforts being made by the Ministry of Advanced Education and a selection of public post-secondary institutions to implement the 25,000 seat growth plan.

Overall, we were pleased to find that the ministry and the sample of institutions we examined are managing this initiative in keeping with principles of good business practice. However, some changes are needed to ensure its success. Most important of these is that the ministry review its approach to post-secondary funding to ensure it effectively supports the achievement of the 25,000 seat growth objective, and that both the ministry and the institutions do a better job of identifying risks to success as well as developing proactive strategies to address those risks.

A summary of our key findings and recommendations is provided in the "Executive Summary" section of the report. Readers looking for a complete discussion of the issues will find it in the "Detailed Report."

I would like to thank the staff from Ministry of Advanced Education and the seven post-secondary institutions we visited for the cooperation and assistance they provided to my audit staff during their work on this audit.

A handwritten signature in black ink, appearing to read "Arn van Iersel", with a large, sweeping flourish at the end.

Arn van Iersel, CGA
Auditor General (Acting)

Victoria, British Columbia
December 2006

Auditor General's (Acting) Comments

Audit Team

Susan Jennings

Norma Glendinning

Jacqueline McDonald

Reed Early

Jessica Van der Veen

Amy Hart



Executive Summary

In 2004, the Government of British Columbia announced its plan to expand the size of the public post-secondary education system by 25,000 student seats by 2010. Almost every public post-secondary institution in every region of the province was allocated a portion of the new student seats (see Appendix A). This initiative signals government's commitment to support and enhance public post-secondary education. If successful, it means that an increased number of British Columbians will gain access to public post-secondary education programs and services.

Before the announcement of the 25,000 seat expansion plan, British Columbia's public post-secondary institutions were calling for renewed public investment in post-secondary education, citing a growing gap between demand for post-secondary programs and services and the ability of the province to meet this growing demand.¹ In response, the government introduced the 25,000 seat expansion project and committed to investing \$1 billion to ensure its success (\$800 million in building construction and \$200 million in education service delivery).

Audit Purpose and Scope

The purpose of this audit was to assess whether the Ministry of Advanced Education and a selection of post-secondary institutions are increasing access to post-secondary education in a manner that is consistent with good business management and with government's vision for post-secondary education. (See the sidebar for an explanation of how we chose our sample.)

Based on the outcome of this assessment, we intended to comment on whether the public post-secondary education system would likely achieve its 25,000 seat expansion objective by 2010.

¹ Review discussion papers at The University Presidents' Council website (www.tupc.bc.ca) and the BC College Presidents' Council website (www.bccolleges.ca).

Executive Summary

Audit Sample Overview

In addition to focusing on the Ministry of Advanced Education in this audit, we sampled three universities, two community colleges, one university college and one institute. In selecting the sample size and composition, we looked at the full-time equivalent (FTE) student seat allocations for the 25,000 space expansion initiative (see Appendix A).

We selected a sample of institutions to which more than half of the seats were allocated, and we considered the magnitude of growth the allocations represented to each institution. We also sought to include at least one type of each institution and to ensure broad regional representation.

The final audit sample accounted for 58% of the 25,000 seat allocations and was regionally representative of the whole province. Along with the ministry, it included the following institutions: British Columbia Institute of Technology, College of the Rockies, Douglas College, Malaspina University College, Simon Fraser University, University of British Columbia and University of Northern British Columbia.

The audit focused on the role of the Ministry of Advanced Education as leader and manager of the initiative and on the role of the institutions as “implementers” of the initiative. In our examination, we looked at activities undertaken in the first two fiscal years of the initiative: 2004/05 and 2005/06. We did not review enrolment numbers for 2006/07 as the final, audited results will not be available until spring 2007.

We expected the ministry and the seven institutions to be managing the 25,000 seat initiative in keeping with principles of good business management. We expected to find:

- evidence of clear planning linked to government’s goals and objectives for public post-secondary education;
- identification of risks and proactive strategies to address them;
- clear and ongoing communication, consultation and problem-solving between the ministry and institutions;
- careful allocation of resources to meet planned objectives;
- close monitoring and reporting of activities and results; and
- evidence of adjustments to ensure success in implementing the new student seats and achieving the 25,000 seat expansion objective.

Audit Conclusion

Based on our review, we believe a majority of the 25,000 new seats will be filled with students by the target 2010 year (fiscal 2009/10). Current population and labour market projections suggest that demand for post-secondary education will increase

Executive Summary

to at least 2010, and 2005/06 institutional seat creation results show improvement. As well, both the ministry and the sample of institutions we examined are striving to manage this initiative well. It is, however, behind schedule and changes are needed in some critical areas. The most important changes we recommend are that the risk management practices of the ministry and the institutions be strengthened, and that the approach used to fund post-secondary education institutions be reviewed to ensure it supports effectively the 25,000 seat growth plan.

Key Findings and Recommendations

The 25,000 seat initiative is currently behind schedule

After the first two years of this six-year initiative, audited results show that 4,004 of the 25,000 new seats have been filled with students. The ministry's plan was to have 7,417 new seats filled by this time, so the initiative is off to a slower than planned start. Behind the slow start is the issue of softening student enrolment. In 2004/05, the rate of growth in the number of student applications and enrolments at British Columbia's public post-secondary institutions slowed compared with the rate in the past (see Appendix B). At a few institutions, enrolment even declined.

Post-secondary education enrolments are sensitive to several factors: tuition and fee increases, revised student aid provisions, changes in debt levels, fluctuations in the labour market and shifts in demographics.² British Columbia has experienced changes in all of these areas in recent years. In 2002, the government lifted the tuition freeze in BC, allowing rates to increase close to the national average before capping increases to the rate of inflation in 2005. The government also altered its student aid provisions, eliminating student grants while enhancing loan remission. At the same time, British Columbia's economy and labour market has also improved, posting the biggest gains in the employment rate compared to other provinces between 2003 and 2004, and matching Alberta in job creation.³ Meanwhile, the population of the largest cohort of

² For example: Buss, C. *et al* (2004). "Cost, Quality and Enrollment Demand at Liberal Arts Colleges." *Economics of Education Review*, 23(1), 57-65; Heller, D.E. (1996). *Tuition, Financial Aid, and Access to Public Higher Education: A Review of the Literature*. U.S.; Massachusetts. Parker, J. and Summers, J. (1993). "Tuition and Enrollment Yield at Selective Liberal Arts Colleges." *Economics of Education Review*, 12(4): 311-24.

³ Institute of Chartered Accountants of British Columbia (2005). *BC Check-up*; www.bccheckup.com.

Executive Summary

post-secondary participants (those aged 18 to 24) is declining in most regions of the province.⁴

The impacts of these interacting factors help explain the softening in student enrolment. We expected the ministry and institutions to be well aware of these influences and to have been developing strategies to offset any negative impacts. We found, however, that softening enrolment caught many institutions and the ministry by surprise. They were just beginning to examine the problem and to make adjustments to address it in 2005. One reason for surprise, we believe, is weak risk management. Although we found varying practices, all of the institutions and the ministry would benefit from improving their risk management practices. Therefore, we recommend that:

- **the ministry and institutions each introduce or strengthen formal risk identification and management practices across their organizations in order to support the successful achievement of results.**

We recognize, however, that addressing the potentially negative consequences of interacting effects is beyond any one institution or the ministry to control and a coordinated response is needed. To this end, we recommend that:

- **the ministry lead and collaborate with all of British Columbia's public post-secondary institutions to develop a coordinated response for remediating combined risk factors that contribute to softening post-secondary student enrolments.**

More effective and transparent allocation of the funds provided would help achieve the 25,000 seat growth objective

In reviewing how the ministry determines and allocates funds to achieve the 25,000 seat expansion plan, we looked for evidence of good linkages between planned objectives and funding decisions. We found that growth funding could have been allocated more effectively and transparently to achieve the objectives of the 25,000 seat initiative.

⁴ BC Stats (2006). *Population Projections* (P.E.O.P.L.E. 30); www.bcstats.gov.bc.ca.

Executive Summary

Since the early 1960s, the provincial government has worked to create a public post-secondary education system made up of a diverse group of institutions located in every region of the province. With this in mind, the ministry considered the needs of all of the province's regions when developing the expansion plan. Ultimately it chose to allocate growth seats (and associated growth funding) to all but one public post-secondary institution, even though, in recent years, a number of institutions had not been able to deliver all of the seats previously allocated to them. Allocating more seats to such institutions does not appear to be a particularly effective use of resources, so why would the ministry do this?

Part of the answer, we believe, lies in limitations of the ministry's approach to funding. The ministry funds post-secondary institutions primarily according to what they received the previous year (the "base"). It then adds an incremental amount calculated on the number and type of new seats to be delivered. Because, year to year, the institutions may receive little new money from the province to help cover inflationary costs, new seat allocations is one way for institutions to fund their existing operations—and for government to meet its objective of providing wide access to advanced education. At the same time, however, this approach to seat allocation puts the 25,000 seat initiative at risk because funding meant to be used for creating new seats ends up being used to maintain existing seats.

The ministry has been supporting post-secondary institutions in this way for many years—long before the announcement of the 25,000 seat expansion plan. In our view, however, funding in this manner weakens the linkages between objectives and resources and is not transparent. In the 2005/06 fiscal year, the government engaged an independent consulting company to review post-secondary institution funding. Two reports were produced. The first report focused strictly on universities and the British Columbia Institute of Technology, and the second covered colleges, university colleges, and four institutes.⁵ One of the recommendations in the second report stated that "funding decisions should transparently indicate what, if any, inflationary

⁵ Report 1: Perrin, Thoreau and Associates, for the Ministry of Finance. Unpublished. *Post-secondary Budget Review*. October 2005. Report 2: Perrin, Thoreau and Associates, for the Ministry of Advanced Education. Unpublished. *Post-secondary Budget Review Phase II — University Colleges, Colleges and Institutes*. June 20, 2006.

Executive Summary

costs are being covered and the service implications of the funding level.” We agree and therefore recommend that:

- **the ministry fund public post-secondary institutions transparently, showing clearly how much funding is being provided to meet the 25,000 seat expansion plan and how much is covering inflationary pressures.**

We also found that current funding decisions are not based on a good understanding of the actual costs to deliver a student seat at any particular institution. The amount of incremental funding each institution receives depends on both the number of full-time equivalent (FTE) student seats it is allocated by the ministry and, to a lesser degree, the types of programs it delivers. Most institutions receive the same amount per FTE (\$7,200) for the majority of their programs. The \$7,200 was determined based on historical patterns, but it has not been reviewed recently to determine if it is still reasonable. Lack of current program cost data for each institution is a risk for the ministry because block funding decisions and seat allocations are not supported with current, objectively derived data of what it costs to fund quality programs and services.

What is an FTE?

Technically, one full-time equivalent (FTE) represents one full-time student taking a full course load. Two part-time students may add up to one FTE, depending on how an FTE is calculated. This term is often used interchangeably with “seat” or “space.”

Given this assessment, we recommend that:

- **the ministry establish a process to determine, and periodically review, the actual cost of delivering programs by institution, and then use this information to better inform its block funding decisions.**

Institutions are planning and managing for growth, but need better human resource succession plans

We found that all of the institutions we visited had plans in place to accommodate growth in student spaces. All of them were creating new programs and were looking at ways to improve the services they provide to better attract and retain students.

However, one area of weakness is in succession planning. Most institutions in our sample are already having problems recruiting key faculty in high demand areas. With the unprecedented rise in “baby boomer” retirements that is expected to occur in the near future, this situation is going to become even more challenging.

Succession Plans

The ongoing success of an institution depends largely on it having a strategy for maintaining the continuity of critical positions. The succession plan identifies various strategies for ensuring knowledge transfer in the face of expected and unexpected staff departures. It usually identifies possible candidates and recruitment strategies and outlines how best to prepare successors. Ideally, it is coordinated with an integrated human resource program of assessment, training and development. The plan should be well documented, achievable and sponsored by executive.

We looked to see if institutions were preparing for this eventuality through formal succession planning (see sidebar). We found that, of the seven institutions we reviewed, none had developed comprehensive human resource succession plans; however, two of the seven said they were in the process of developing such a plan, and two had studied the problem, written reports and implemented strategies but had not yet articulated a formal plan.

We recommend that:

- **all institutions develop human resource succession plans so that resource needs for the future are better identified and managed.**

Continual improvement in performance reporting on the expansion initiative would enhance transparency and accountability

People of British Columbia expect public sector organizations to be accountable. Through transparency and accountability, good reporting facilitates public trust and effective results-based management. Regular use of performance information to track progress helps an organization identify areas of concern, which can then influence decision-making and generally improve management processes. In this audit, we expected to find institutions and the ministry carefully monitoring enrolment, analyzing results and reporting this information to the public.

We found that both the ministry and the institutions we sampled do carefully monitor student seat growth—measured in terms of student FTEs—at various key points during the year. This enables them to react as necessary to accommodate student needs. However, a thorough analysis of trends and the factors influencing results was missing from most institutions' 2005/06 annual service plan reports. While all the organizations report the number of seats they actually delivered along with their funded targets, only about half provided sufficient contextual information. Historical trend information was missing in most cases, as were explanations of performance shortfalls. Only the ministry and two institutions provided trend information in their 2005/06 service plan reports—an improvement compared to their 2004/05 reports.

We recommend that:

- **the ministry require that institutions present, in their service plan reports, growth targets and actual results over time and explain variances.**

Executive Summary

Summary of Key Findings and Recommendations

Finding: The 25,000 seat initiative is currently behind schedule

Recommendation 1: The ministry and institutions should each introduce or strengthen formal risk identification and management practices across their organizations in order to support the successful achievement of results.

Recommendation 2: The ministry should lead and collaborate with all of British Columbia's public post-secondary institutions to develop a coordinated response for remediating combined risk factors that contribute to softening post-secondary student enrolments.

Finding: More effective and transparent allocation of the funds provided would help achieve the 25,000 seat growth objective

Recommendation 3: The ministry should fund public post-secondary institutions transparently, showing clearly how much funding is being provided to meet the 25,000 seat expansion plan and how much is covering inflationary pressures.

Recommendation 4: The ministry should establish a process to determine, and periodically review, the actual cost of delivering programs by institution, and then use this information to better inform its block funding decisions.

Finding: Institutions are planning and managing for growth, but need better human resource succession plans

Recommendation 5: All institutions should develop human resource succession plans so that resource needs for the future are better identified and managed.

Finding: Continual improvement in performance reporting on the expansion initiative would enhance transparency and accountability

Recommendation 6: The ministry should require that institutions present, in their service plan reports, growth targets and actual results over time and explain variances.



Detailed Report

The public post-secondary education system in British Columbia

Public post-secondary education in the Province of British Columbia exists to ensure all people in the province may gain access to higher education in or close to the communities where they live. Developing a provincial network of public post-secondary education institutions began in the 1960s and has expanded into a complex collection of institutions that provide both similar and unique programs, services, certificates and degree credentials. At present, there are 26 public post-secondary education institutions located throughout British Columbia: 6 universities, 3 university colleges, 12 community colleges and 5 provincial institutes. These institutions range in size from the University of British Columbia (UBC) with nearly 40,000 full-time equivalent (FTE) students to the Institute of Indigenous Government with 147 FTEs (Exhibit 1).

The mandates of universities, institutes, university colleges and colleges as described in provincial legislation differ. Universities are to provide instruction in all branches of knowledge and to establish faculties for the pursuit of original research. Legislated autonomy sets universities apart from other post-secondary institutions.

University colleges are mandated to provide courses of study leading to an undergraduate degree, other post-secondary education or training, as well as adult basic education and continuing education. Colleges are to provide undergraduate degree program courses at the first and second-year level, as well as other post-secondary education or training, adult basic education and continuing education. And provincial institutes are to provide instruction and other functions as designated by the Minister of Advanced Education.

Background

Exhibit 1

British Columbia's public post-secondary educational institutions

	2005/06 Student Full-Time Equivalents ^a
Universities	
Royal Roads University	1,850
Simon Fraser University	18,927
Thompson Rivers University	7,293
University of British Columbia	37,642
University of Northern British Columbia	2,902
University of Victoria	15,497
Institutes	
BC Institute of Technology	13,840
Emily Carr Institute of Art and Design	1,302
Institute of Indigenous Government	147
Justice Institute of British Columbia	2,444
Nicola Valley Institute of Technology	274
University Colleges	
Kwantlen University College	8,326
Malaspina University College	6,143
University College of the Fraser Valley	5,796
Urban Colleges	
Camosun College	6,709
Capilano College	4,854
Douglas College	6,989
Langara College	6,341
Vancouver Community College	6,747
Rural Colleges	
College of New Caledonia	2,554
College of the Rockies	1,723
North Island College	1,881
Northern Lights College	1,362
Northwest Community College	1,456
Okanagan College	4,138
Selkirk College	2,107
System Total	169,244

^a Based on the ministry's new method of calculating FTEs and includes seats funded by the Ministry of Advanced Education and for Entry Level Trades Training courses, funded by the Ministry of Economic Development

Source: Ministry of Advanced Education

Background

The public post-secondary education system is always changing as institutions, program offerings and services are modified, added or dropped. Recently, for example, the government opened up degree granting rights to colleges and institutes, giving these institutions opportunities to develop and offer applied degree programs, and university colleges have applied for and received federal and provincial funding for original research programs. As well, in 2005, three new institutions were created: the University College of the Cariboo was converted to university status and renamed Thompson Rivers University; and Okanagan University College was split into two institutions—UBC Okanagan and Okanagan College.

Post-secondary education trends prompted the 25,000 seat initiative

Leading up to the 25,000 seat expansion plan were a number of trends that indicated to the ministry an expansion project was warranted. Various studies and expert opinions presented to the ministry a few years before the announcement asserted that demand for post-secondary education was greater than supply. Applications for entry into post-secondary institutions were rising at a rate greater than offers of entry, and admission to universities was becoming more difficult, requiring increasingly higher grade point averages.⁶ For example, in 2003 (the year before the expansion project was launched), the minimum Grade Point Average (GPA) required to get into UBC from secondary school was 82% in Arts programs and 87% in Science programs (Exhibit 2)—a 5% higher GPA than in 1999.

Exhibit 2

Minimum university direct entry GPAs (%) from high school, 1999–2005

University ^a		1999	2000	2001	2002	2003	2004	2005
Arts (1st yr)	UBC	76	78	77	78	82	82	82
	SFU	80	76	78	75	80	77	80
	UVIC	76	71	75	81	81	80	76
Science (1st yr)	UBC	82	83	82	85	87	88	89
	SFU	78	76	78	75	80	78	80
	UVIC	76	71	75	81	81	80	76

^a UBC—University of British Columbia; SFU—Simon Fraser University; UVIC—University of Victoria

Source: The University Presidents' Council, Facts and Figures Table 2.1

⁶ British Columbia Council on Admissions and Transfer. Author: Jim Soles. *Admission of Transfer Students in British Columbia Post-secondary Institutions: Policies, Practices and Capacity*. July 2001.

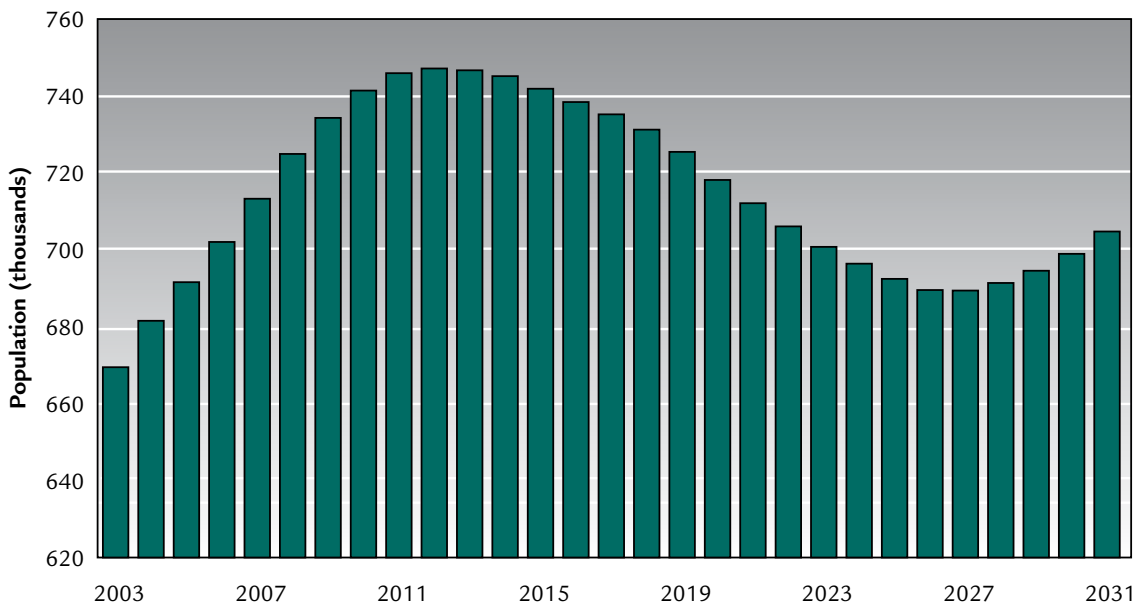
Background

At the same time, two indicators frequently used for estimating future demand for post-secondary skills and education—projected employment requirements and population growth projections—were both indicating that the demand for post-secondary skills and education would continue to rise. The population group most likely to seek post-secondary education (those 18- to 29-years of age) was expected to grow in British Columbia until about 2015, particularly in the Fraser Valley.⁷ Labour market employment requirement forecasts also suggested that the majority of employment opportunities in the future would require some post-secondary level training and credentials.

Today, these population and employment forecasts indicate that demand for post-secondary skills and education will continue to grow, though not as rapidly as in previous decades. More recent data also suggests that the 18- to 29-year-old population will continue to grow; however, the new projection is that it will peak in 2012 rather than 2015 (Exhibit 3). The drop in this age range is predicted to occur disproportionately in seven college regions (Exhibit 4).

Exhibit 3

British Columbia projections for the 18 to 29 year-old population, 2003-2031



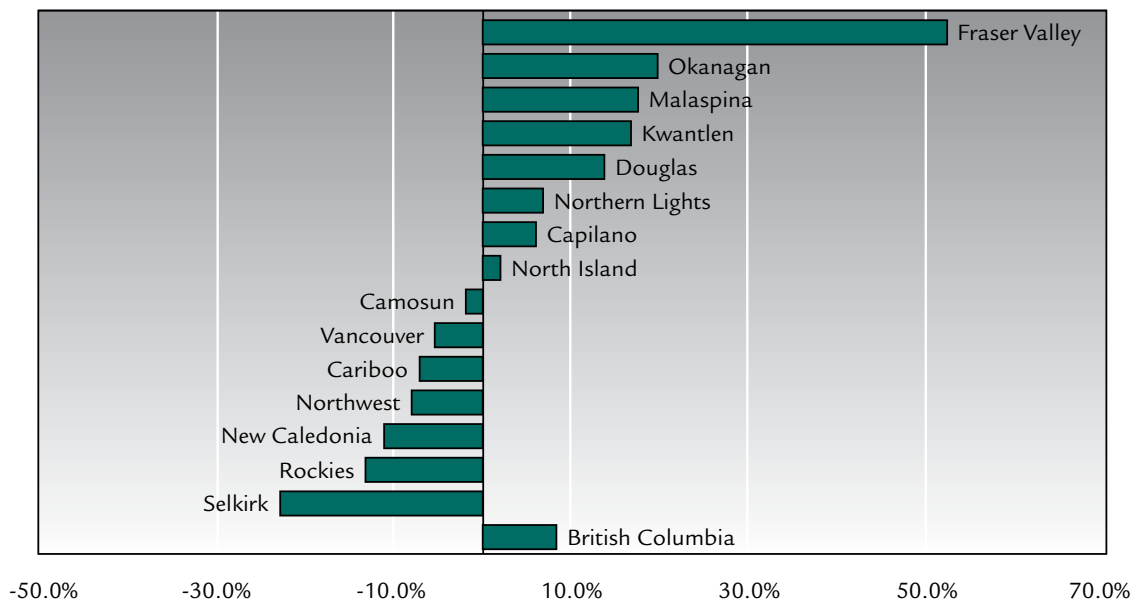
Source: BC Stats, P.E.O.P.L.E. 30, 2006

⁷ BC Stats. *BC Population Reflections. Reflecting P.E.O.P.L.E. 27 Population Projections* by BC Stats. November 2003.

Background

Exhibit 4

Regional population growth projections for 18- to 29-year-olds, 2003-2031



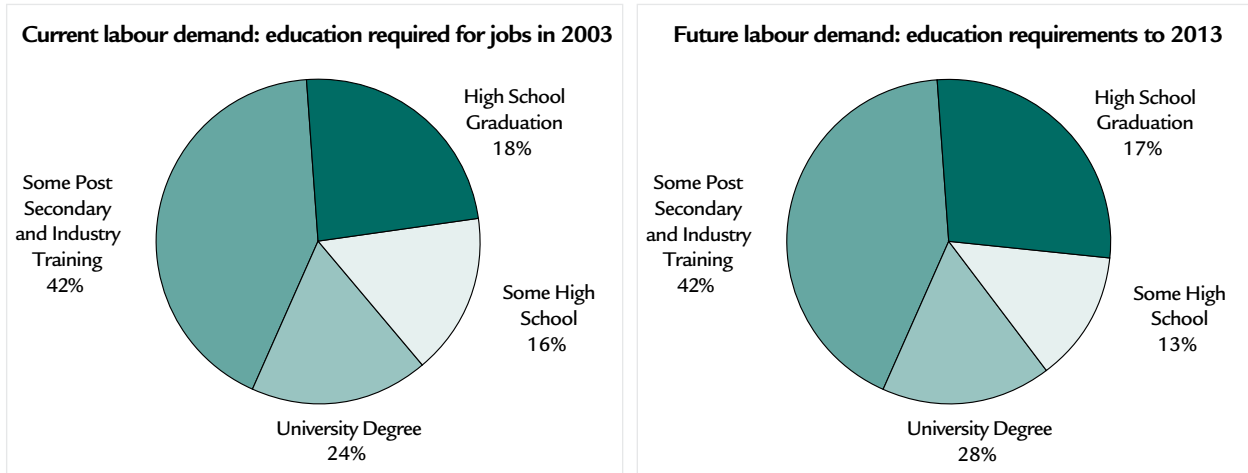
Source: BC Stats, P.E.O.P.L.E. 30, 2006

More recent labour market information also confirms that the majority of employment opportunities in the future will require some post-secondary level training and credentials. As Exhibit 5 shows, 66% of jobs required more than high school completion in 2003. This percentage is expected to rise to 70% by 2013.

Background

Exhibit 5

Projected employment requirements in British Columbia, 2003 to 2013



Source: Statistics Canada and BC Ministry of Advanced Education.

Paralleling this trend in labour market demands has been an increase in the percentage of students who want post-secondary education. For a variety of reasons, the percentage of 18- to 29-year-olds attending post-secondary institutions in British Columbia has been rising: from 19% in 1990 to 28.6% in 2000, the third highest in the country (Exhibit 6).

Exhibit 6

Post-secondary education participation rates (%) for the population aged 18 to 29, for Canada and the provinces, 1990 and 2000 (most recent data available)

	1990	2000	Change
Canada	21.0	27.2	6.2
British Columbia	19.0	28.6	9.6
Alberta	18.4	23.0	4.6
Saskatchewan	17.6	24.1	6.5
Manitoba	20.1	24.5	4.4
Ontario	21.4	26.6	5.2
Quebec	23.3	30.8	7.5
New Brunswick	17.7	21.3	3.6
Nova Scotia	20.3	25.0	4.7
Prince Edward Island	16.0	26.7	10.7
Newfoundland	18.6	29.5	10.9

Source: BC Stats (data drawn from Canadian Labour Force Survey)

Background

Expanding post-secondary education by 25,000 seats

The provincial government's response to this increasing demand for post-secondary education in British Columbia was to launch the 25,000 seat expansion project in 2004. Government's stated aim for this project is to improve access to post-secondary education and it is one of its key strategies for achieving its goal of the province becoming "the best-educated, most literate jurisdiction on the continent." Since the project was initiated, the government has committed significant public resources—about \$1 billion over six years in new public funding for building construction (\$800 million) and education service delivery (\$200 million).

This is the third time the government of British Columbia has sought to expand the public post-secondary education system. Two other expansion initiatives took place in the 1960s and the 1990s (see sidebar).

Two Earlier Post-secondary Growth Initiatives in British Columbia

The 1962 report *Higher Education in British Columbia and a Plan for the Future* written by UBC President, John B. Macdonald led to the first wave of public post-secondary institution expansion in British Columbia. Both the University of Victoria and Simon Fraser University were created in 1963, followed by the British Columbia Institute of Technology in 1964. Over the next decade, 10 colleges in total were created throughout the province. Vocational schools, which had been operating within the province for many years, were amalgamated with the new colleges and over time evolved into the system of colleges and institutes that exists in the province today. This was the beginning of mass access to public post-secondary education in British Columbia, which in turn led to an increase in the diversity of program and credential opportunities.

The second round of public post-secondary growth came in 1989 when the government of the day announced its *Access for All* initiative. That expansion project provided for the creation of 16,000 new post-secondary seats over six years. University colleges and the University of Northern British Columbia were also created, further enhancing degree-oriented programming and credentials offered throughout the province.

In 2004, the Ministry of Advanced Education was given the mandate to manage the 25,000 seat expansion project, but almost every public post-secondary institution has had a role to play in delivering the seats.

The project is part of a larger strategic plan—the *Strategic Investment Plan* (SIP)—that has three key components:

1. enhancing public post-secondary access opportunities province-wide (that is, increasing the number of public post-secondary seats by 25,000);
2. targeting funding for specific programs to meet provincial social and economic needs and priorities, and
3. improving programs and strategies to support and encourage access for under-represented groups such as new immigrants and aboriginal learners.

Background

About the audit

The purpose of our audit was to assess whether the Ministry of Advanced Education and a selection of public post-secondary institutions are increasing access to post-secondary education in a manner that is consistent with good business management and with government's vision for post-secondary education. We also sought to comment on the likelihood that government will achieve its goal of adding 25,000 new student seats to the education system by 2010.

Our audit focused on the first objective of the Strategic Investment Plan (that is, enhancing access province-wide) and not on the other two objectives listed above.

We chose to audit the ministry because it is responsible for initiating, funding and ensuring the overall success of the expansion initiative. And we chose to audit a sample of post-secondary institutions because the ministry cannot succeed on its own. Rather, it relies on the cooperation and efforts of British Columbia's post-secondary institutions. In selecting a sample of institutions for this audit, we considered several factors: the number of seats allocated to each institution; the magnitude of growth this allocation represented; geographic region; and type of institution. Together, the seven institutions we selected have been allocated 58% of the 25,000 new post-secondary seats (Exhibit 7).

Exhibit 7

Audit sample seat allocations under the 25,000 seat expansion plan

Institutions	Total number of funded seats in 2003/04	Number of seats allocated under expansion plan	Institutional growth under the expansion plan (%)
British Columbia Institute of Technology	9,269	1,160	12.5
College of the Rockies	1,430	420	29.4
Douglas College	6,889	1,500	21.8
Malaspina University College	5,696	1,100	19.3
Simon Fraser University	16,850	3,000	17.8
University of British Columbia	34,444	6,700	19.5
University of Northern British Columbia	2,811	600	21.3
Total		14,480	
Total percentage of 25,000 seats		58%	

Source: Ministry of Advanced Education, FTE Allocations

Background

We developed the assessment criteria for this audit by drawing on generally understood and accepted good management practices. The criteria were written from the perspective that, if the post-secondary education system is to successfully implement 25,000 new seats by 2010, the ministry and institutions have to make plans, allocate their resources, monitor their performance, make adjustments, report their progress and communicate effectively with each other.

In conducting this audit, we reviewed relevant documentation and interviewed personnel in the ministry and the institutions we selected. We performed our work in accordance with assurance standards recommended by the Canadian Institute of Chartered Accountants, and included such tests and other procedures we considered necessary to obtain sufficient evidence to support our conclusions.

The findings and conclusions presented in this report are based on our analysis of the ministry and the seven institutions combined. We do not provide our findings separately for each of the seven institutions, although we do occasionally comment on the differences between one type of institution and another (e.g., universities versus other institutions). We also sometimes mention specific institutions to illustrate a point.

Our focus was on the activities undertaken in the 2004/05 and 2005/06 fiscal years, and our field work was conducted between August 2005 and June 2006.



Planning and Resourcing for Growth: Findings of the Ministry Audit

Planning is a necessity if vision, goals and objectives are to be achieved. Good working plans that are practical are like maps that effectively mobilize and guide human activity and align both horizontally and vertically within an organization to ensure everyone is working together. Reliable and relevant data and information are vital for meaningful planning, and careful documentation provides for long-term corporate memory. Closely tied to planning must be resourcing. Strong linkages between strategic planning and budget planning are key: too few resources or insufficiently focused resources increase the risk of waste and inefficiency—or worse—of failure to achieve intended results.

We expected to find that ministry staff had carefully coordinated their planning and resourcing for the 25,000 seat expansion, providing a “clear line of sight” to achieving results that are in keeping with government’s vision for post-secondary education. We also expected that they would have made good use of data and information, and that they would be carefully identifying, evaluating and managing the risks associated with access and growth. Finally, we expected that they would clearly communicate the details of the plan and their results to the public and institutions.

In this section, we present the results of our findings for how well the Ministry of Advanced Education planned, resourced and communicated the 25,000 seat expansion initiative. To facilitate reader understanding, in each section we identify what we were looking for, why, and what we found.

Better use of data and information would improve ministry needs assessments

Needs assessments based on good use of accurate and relevant data from multiple sources are vital to good planning decisions, and proper documentation of decisions made ensures long-term corporate memory.

For this audit, we expected to find a thorough assessment of needs based on good use of data and information, consultation, and clear documentation of planning decisions. In preparing its 2004/05 funding proposal to government, the ministry conducted a needs analysis, making effective use of population projection data to support its decisions. These decisions were fairly well documented. The needs analysis, however, was based primarily on one source of information: future population forecasts for the province.

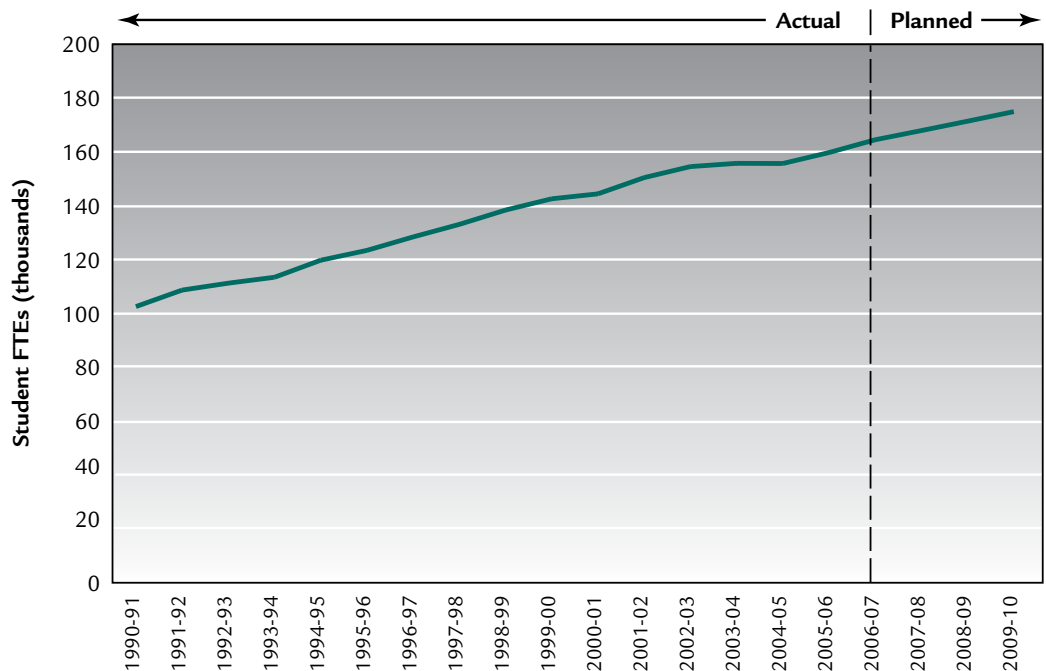
Planning and Resourcing for Growth: Findings of the Ministry Audit

Although such forecasts are useful to help determine future needs, a more complete needs analysis would also have made use of past performance data and include institution consultations.

In carrying out its needs analysis, the ministry focused on the 18- to 29-year-old age group. Staff had to make an educated guess as to what the potential demand for services would be for this segment of the population in the future. Ultimately they chose to estimate demand at double the projected population growth rate of 18- to 29-year-olds—which, at the time they did the calculation, amounted to approximately 25,000 new student seats. The reasons underpinning this decision are not well documented, but the number spread over six years amounts to steady growth at 2–3% annually, a rate that is generally consistent with the incremental growth pattern over the last 15 years of the public post-secondary education system (Exhibit 8).

Exhibit 8

Actual student full-time equivalents (FTEs) and planned growth in public post-secondary education institutions in British Columbia, 1990–2010



Source: Ministry of Advanced Education Audited FTE Reports

Planning and Resourcing for Growth: Findings of the Ministry Audit

Having determined that 25,000 was a reasonable target, the ministry then needed to determine where to allocate these seats provincially. One key policy consideration that guided these allocation decisions was regional equity (described by the ministry as ensuring equitable access opportunities throughout the province). The ministry analyzed population projection data by region, identifying areas of the province not being well served in terms of student seat allocations. The objective was to ascertain how many seats would be needed to ensure that 150 or more post-secondary seats were available per 1,000 of the target population (18- to 29-year-olds) in each region by 2009/10. The ministry then used this information as a guide to give every institution but one some seats.⁸

We found that the rationale behind the number of seats allocated to each institution was not well documented, was not based on consultations with the institutions, and did not sufficiently consider how well each institution had been performing in recent years. We reviewed student seat utilization rates at all post-secondary institutions in the three years leading up to the initiative⁹ (Exhibit 9). We found that, although some institutions have been consistently delivering more seats than allocated, others have not been able to fill all of the seats allocated to them by the ministry. Despite these utilization rates, the ministry chose to allocate growth seats to all institutions. We determined the reason is related to the approach the ministry uses to fund post-secondary institutions. We discuss these findings next.

⁸ The Institute of Indigenous Government did not receive any new seats because, given its past utilization rates, the ministry was concerned that it would not be able to deliver any additional seats.

⁹ Utilization is the percentage of seats delivered versus the planned target.

Planning and Resourcing for Growth: Findings of the Ministry Audit

Exhibit 9

Seat utilization rates by public post-secondary education institution in British Columbia

Institutions	2001/02 Seat Utilization	2002/03 Seat Utilization	2003/04 Seat Utilization
Universities	%	%	%
Royal Roads University	115.8	129.2	111.0
Simon Fraser University	107.6	111.4	107.8
University of British Columbia	108.0	108.1	108.2
University of Northern British Columbia	114.2	109.6	104.7
University of Victoria	107.9	104.9	104.6
Institutes			
British Columbia Institute of Technology	106.7	104.5	104.3
Emily Carr Institute of Art and Design	96.7	92.6	101.7
Institute of Indigenous Government	50.9	74.7	98.9
Justice Institute of British Columbia	105.2	97.8	97.8
Nicola Valley Institute of Technology	87.1	90.9	80.1
University Colleges			
Kwantlen University College	102.4	101.0	102.5
Malaspina University College	98.5	92.3	94.0
Okanagan University College ^a	89.5	90.8	96.7
University College of the Cariboo ^b	102.7	94.9	93.4
University College of the Fraser Valley	105.7	105.8	101.6
Urban Colleges			
Camosun College	97.4	92.8	93.8
Capilano College	93.6	91.6	91.9
Douglas College	99.4	97.7	99.7
Langara College	104.1	103.2	104.9
Vancouver Community College	108.6	107.7	93.2
Rural Colleges			
College of New Caledonia	93.0	87.6	83.7
College of the Rockies	109.0	108.0	99.5
North Island College	89.3	85.4	83.4
Northern Lights College	90.9	80.9	81.5
Northwest Community College	85.2	85.3	77.2
Selkirk College	98.4	85.1	81.6

^a This institution has since been re-established as UBC-Okanagan and Okanagan College

^b This institution has since been re-established as Thompson Rivers University

Source: Ministry of Advanced Education (Actual seats delivered/Funded seat Allocations)

Planning and Resourcing for Growth: Findings of the Ministry Audit

More effective and transparent allocation of the funds provided would help achieve the 25,000 seat growth objective

We reviewed the ministry's budget and other documents, and conducted interviews to find out how the ministry determined what resources were needed to meet the intended objectives of the 25,000 seat expansion plan. We were looking for evidence of good analysis and linkages among planned objectives, operation, capital and other financial resource needs.

We concluded that the linkages between public policy and post-secondary institutional funding are tightly interconnected (that is, the ministry, in developing its 2004/05 three-year budget plan, included the 25,000 seat growth plan). However, we found that growth funding could have been more effectively and transparently allocated to achieve the objectives of the 25,000 seat initiative.

How the funding model works

Public post-secondary institutions in British Columbia receive about one-half of their total revenue from the provincial government in the form of grants from the Ministry of Advanced Education. The rest they receive from tuition, ancillary services, federal grants, donations, endowments, investments and research revenue. "Modified block funding," provided by the ministry, gives institutions discretion to use the funds they are granted in ways they feel best meets the needs of their students and their communities. The funding is deemed "modified" because the ministry earmarks a small portion of it for specific purposes such as targeted programs and other provincial priorities.

The amount of funding an institution receives each year is determined primarily on what it received the previous year (this is "the base"). The base from the previous year is not necessarily adjusted to cover inflation. Instead, government decides each year whether, and by how much, it will fund institutions to help them manage their inflationary pressures.

In addition to the base, institutions receive an incremental amount that is determined by the number and type of seats it has been assigned to deliver. Thus, the offer of new seats—and with it new funding—can be of benefit to an institution. But there is a stipulation; the institution is expected to fill the seats in the year they are allocated, and if it does not, the ministry reserves the right to reallocate.

Planning and Resourcing for Growth: Findings of the Ministry Audit

The ministry's approach to funding is problematic

Despite how the funding model is supposed to work, the reality is that institutions have been receiving incremental funding even when they have been unable to meet performance targets because the ministry uses the same funding approach to achieve two policy objectives: 1) expanding the system by 25,000 seats; and 2) maintaining local access to public post-secondary education province-wide.

The funding approach is problematic because funding intended for the implementation of 25,000 new student seats is also being used to help cover inflationary costs. This approach obscures funding transparency and weakens the linkages between the objectives of the 25,000 seat initiative and resources.

Another problem is the way the ministry determines seat costs. Its current approach is not sufficiently informed by what it actually costs to deliver seats. Most institutions receive \$7,200 per full-time equivalent student (FTE) for the majority of their programs (referred to as "general growth seats"). This amount is an historical number and is not supported by current data and analysis. It also does not consider the different mandates and cost structures of the institutions. Institutions also receive seats and funding for some targeted programs such as nursing and computer engineering. Funding for these seats is negotiated and is almost always higher than the amount provided for general growth. As well, some institutions may sometimes negotiate a rate higher than \$7,200 for general growth seats. For example, UBC Okanagan, Okanagan College and SFU Surrey each received more than \$7,200 per general growth seat when they were created because they successfully argued that their costs per seat were higher.

Lack of current data on actual program costs, along with the inherent complexity of negotiating with individual institutions, poses significant risks for the ministry. Some institutions, for instance, may end up not being as well funded as others. The ministry does monitor the financial health of institutions and increases their base funding if such an increase is warranted and it has resources available to do so. But the process is far from predictable, may not be fair, and is neither clear nor transparent.

Planning and Resourcing for Growth: Findings of the Ministry Audit

Using proactive strategies to manage risks would strengthen the ministry's ability to fill the 25,000 seats

The identification and management of risk supports efficient and effective achievement of results. Without good risk management, it is difficult to put opportunities and problems into perspective and address them proactively.

For this audit, we examined the risk assessment prepared for the 25,000 seat expansion proposal, the ministry's risk registry, and other documents provided by the ministry to see if the ministry had adequately assessed and developed proactive strategies to manage risks to the success of the initiative.

In its proposal, the ministry presented the government with an opportunity to fund steady growth of the public post-secondary education system through the addition of the 25,000 new student seats over six years. The ministry outlined how the investment would contribute to the government's economic strategy by providing well trained individuals for the skilled labour market.

What the ministry did not do, however, is conduct a thorough environmental scan or develop a comprehensive risk management plan. Risks it identified in the proposal were not sufficiently outlined or assessed in relation to how they could impede success. Response strategies that were provided were limited and were largely reactive rather than proactive. For the most part, the ministry accepted identified risks, providing assurances to government that it would monitor and take corrective action as necessary.

The one proactive risk management strategy the ministry did implement was to allocate more seats to universities than to colleges in the early years of the initiative and then more seats to colleges than to universities in the later years. The ministry's rationale was tied to the issue of low utilization trends among colleges and the assumption that they would need time to build their capacity to accommodate additional seats.

Although the ministry recognized the need for institutional capacity-building, it did not do an environmental scan to better understand the challenges institutions would face in attempting to achieve their performance targets and it did not develop a strategy to help struggling institutions build capacity. Given the improving provincial economy and job market, increasing tuition and other

Planning and Resourcing for Growth: Findings of the Ministry Audit

fees, and increasing competition for students coming from other provinces and other institutions, there is good reason to question whether struggling institutions will be able to meet the enrolment targets set by the ministry.

Determining the capital construction needs of institutions should be better documented

The government has committed approximately \$800 million in capital funding to support the 25,000 seat expansion initiative. As of August 2006, the ministry had approved 30 capital projects valued at about \$730 million to house close to 15,000 seats. Of the remaining seats, some are to be absorbed into existing space and the rest are being reviewed to determine if new facilities are needed.

We looked at the ministry's capital project approval process to see if the ministry is following sound processes to determine its capital funding priorities. We also examined the quality of the information the ministry uses to assess infrastructure needs at the institutions.

We found that, although the ministry does have a formal process in place for approving capital projects, the extent to which the process is followed is not as transparent as it should be. Institutions wishing to propose a capital project must justify the need, identify options, and present the ministry with a business case. Project funding rests on the business case, and approvals are granted in the form of certificates. For the most part, however, justification of needs and option identification take place informally between the ministry and institutions, and the discussions are not well documented. We did find business cases and project approvals on file for the four projects we examined in detail but noted that construction on one of the projects was started and substantially completed before the approval certificate was granted.

We also found that the ministry needs to improve its institution space audit practice (see sidebar). These audits are conducted at the discretion of the ministry, usually when an institution's request for additional space is inconsistent with the ministry's understanding of its needs. However, such audits are not well documented. For example, one sample audit we examined revealed that while the audit findings were verbally presented to management, neither the audit report nor the minutes of that meeting were on file at the ministry.

What is a Space Audit?

Each year, British Columbia's public post-secondary institutions must submit an inventory of their physical space to the Ministry of Advanced Education. They provide, among other things, the amount of building footage dedicated to classrooms, laboratories and offices.

From time to time the ministry independently verifies the accuracy of some of these submissions by visiting institutions and comparing the reported information to ministry measurements. This is called a "space audit."

Through space audits, the ministry can assess whether the institution is making good use of its existing space or if additional space is needed.

Planning and Resourcing for Growth: Findings of the Ministry Audit

For the most part, the growth plan was clearly communicated to institutions

Having planned and identified the resource needs, the government and the Ministry of Advanced Education communicated news of the 25,000 seat expansion to the media in 2004. In that same year, the ministry's Budget and Accountability letters to each institution included further details about their funding grants and seat allocations. In those letters the ministry also provided a high-level overview of the three main components of the Strategic Investment Plan.

The message "25,000 Seats by 2010" was clearly received and understood by institutions, including the allocation of seats and the targeted FTE expectations. Reporting requirements were also clearly communicated and understood by institutions.

What was not clearly communicated to institutions—and became a source of concern for some institutions—was the rationale used to determine how the seat allocations were distributed provincially. As well, some institutions were confused about the funding available for capital construction projects, in part because funding for capital construction to support the 25,000 seat expansion initiative was not announced at the same time. Only a few capital projects were identified by the government in the series of news releases it produced (in 2004) outlining the expansion initiative.



Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

When institutions plan for growth, they must consider their existing programs, enrolment numbers, facilities and equipment inventory, recruitment and retention rates of faculty and staff, provision of student services, and other details of operation and capital planning. For the seven institutions included in our audit, we conducted interviews and reviewed documents to determine the extent to which each organization recognizes the importance of the above considerations when planning for access and growth. We expected to find the institutions developing plans and strategies in these areas in order to help achieve their growth targets.

Overall, we found that the institutions in our audit sample had plans and processes in place to introduce the student seats allocated to them under the 25,000 seat expansion. In most cases, plans were based on good data and information, although we observed that the institutional research capacity of colleges was weak in comparison with that of universities. Most institutions were also weak in the area of formal risk planning and management. Of the many planning documents we reviewed, few focused on risk or provided proactive solutions to address risks to achieving success.

Institutions are examining their student recruitment and retention practices

Effective student recruitment and retention planning and management are critical to the success of the 25,000 seat expansion plan. We looked at some of the key activities carried out by institutions that facilitate and foster student recruitment and retention, including program management, enrolment management and student services. We expected to find institutions striving to make improvements in these areas with intentions of enhancing student recruitment and retention.

Planning and managing programs

An institution's ability to attract and retain students depends on its ability to develop attractive programs and manage them well. We reviewed each of the seven institutions to determine the extent to which it is developing new programs and enhancing existing programs to achieve its growth objectives related to the expansion initiative. We found that all institutions are developing new programs and have processes in place to review and approve new courses and programs internally.

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

Regular reviews of existing programs are required by the College and Institute Act. The Act states that, “an institution must plan for and evaluate its programs and operations on an ongoing basis.” As a rule, reviews of educational programs are done to ensure they not only remain relevant and accountable but also continuously improve. For example, The British Columbia Institute of Technology (BCIT) conducts at-a-glance reviews of all programs each year and a more comprehensive review at least every five years (more frequently if the annual review reveals concerns). The colleges we visited were all in the process of reviewing and revising guidelines in relation to program review. Universities also review their programs. At Simon Fraser University (SFU), for example, senate guidelines for external reviews have been set to cycle every five to seven years.

Most non-university institutions have established committees composed of community and business members who meet with senior administrators to identify community needs and explore program development opportunities to meet those needs. While these committees help, most non-university institutions still identified the need for better labour market data — particularly information tailored to the regions in which they operate. The weaker institutional research capacity we noted earlier in the report may, in part, explain the reason for this need.

Student enrolment management

Student enrolment management involves careful tracking and analysis of an institution’s current students (that is, who they are, where they came from, their choices, their experiences and their outcomes) as well as reviews of data and information about demographic and labour market changes in the region that could affect future student recruitment. We looked to see if institutions recognize the importance of enrolment planning and management and are developing plans and strategies to enhance student recruitment and retention efforts over time in order achieve their growth targets under the 25,000 seat expansion plan.

We found that all of the institutions we reviewed for this audit are aware of the need for enrolment planning and management and are working towards improving their processes. For colleges and university colleges, the practice of enrolment planning is somewhat new, and they are only just beginning to develop long-

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

What is Multi-Year Planning?

Introduced in 2004/05, multi-year planning is an annual student and program enrolment planning exercise conducted by British Columbia's public post-secondary institutions for the Ministry of Advanced Education. Each June, institutions submit six-year full-time equivalent (FTE) student enrolment estimates by instructional program.

The process is designed to enhance institution decision-making processes through improved long-term operational and capital planning. The ministry also uses this information for strategic planning purposes, reviewing the planned supply of educational services in different ways to gain an enhanced understanding of public post-secondary developments.

range planning processes. To this end, almost all of the institutions we met with welcomed the ministry's multi-year planning process (see sidebar), viewing it to be a positive innovation even if projections extending beyond three years were perceived to be highly speculative. For colleges, it is a first step towards long-term enrolment planning and management.

Several institutions at the college, university college and institute level have enrolment planning committees, some of which include members from the academic community as well as administration. Compared with the larger universities, these institutions have more open admission policies and, until recently, the demand for their courses and programs was greater than the institutions could accommodate. For both of these reasons, enrolment management, therefore, involved looking for ways to accommodate demand and establishing wait lists for courses and programs. Now with the ministry's new multi-year planning requirements, softening student enrolment and the need to plan four-year applied degree program enrolments, colleges, university colleges and institutes are having to allocate their seats to programs years in advance.

Planning for and managing program enrolments over four or more years is something British Columbia's universities have greater experience with. As one administrator described it, the process involves "a little bit of science and a whole lot of art." Therefore, the achievement of intended results is subject to some uncertainty, and unintended impacts may be felt for several years. (The sidebar provides a more detailed discussion about how universities manage enrolment.)

The Science and Art of University Enrolment Management

The process begins with enrolment projections. Senior administrators responsible for institutional research produce tables of information showing how many students will likely be moving into second, third and fourth years of study—taking into consideration historical factors such as retention rates and course loads (which helps to determine full-time versus part-time students) for continuing students.

Enrolment projections are reviewed and debated by committees that include both members of the academic community and individuals from senior administration. Once first-year admissions criteria are set, based primarily on Grade Point Average (GPA), the universities generally accept all those who meet it. At this point there exists some uncertainty. If institutions set their entrance GPAs too low (or if something surprising transpires provincially), the potential for over-enrolment at the first year level is possible. This has happened in the past at both the University of British Columbia and Simon Fraser University (but not at the University of Northern British Columbia because its aim has been to foster growth rather than control it).

In response to these events, the universities hire more teaching staff, add more course sections and juggle classroom space. The impact of over-enrolment is felt not only in the first-year but every year after that—and not only internally. Over-enrolment affects the university's ability to accept transfer students and raises levels of concern at the college level about the health of the transfer system.

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

Student services

Typical Responsibilities of Student Services

- Admissions
- Athletics and social well-being
- Childcare
- Student aid
- Disability assistance
- First Nations supports
- Health services
- Housing
- Library services
- Recruitment
- Religious services
- Student development and counseling

Institutions improve their chances of realizing their growth goals if they focus not only on attracting new students, but also on retaining current students through to graduation. Student services are important to student retention and success. We looked to see if the institutions recognize the need for effective student services in order to retain students through to graduation.

We found that the degree of student services varies by institution, but that all institutions were planning for improvements. There was little evidence of institutions conducting regular surveys of current students to gauge their satisfaction with the provision of student services on campuses. However, we did find evidence that some institutions have surveyed current students to obtain their opinion on certain select services provided to them.

We encourage institutions to continue to review and strengthen student services with an eye to improving student retention. This will support the growth objective of the 25,000 seat expansion plan as well as the achievement of other performance objectives.

Institutions should strengthen the linkages between funding allocations and their growth plans and strategies

As with the ministry, when we examined the institutions we expected to see good linkages between institutional plans and strategies and operating and capital processes and decisions.

Operating funding

We found some linkages between the operating funding processes and institutional growth plans, but some of these linkages are weak. Most institutions employ incremental budgeting. As discussed above, each year the process begins with the base from the previous year, and then negotiations take place to identify and link new funding to relevant plans and strategies. This approach obscures the linkages between planning and resourcing and weakens overall accountability for resources used to achieve goals and objectives. In our view, it also offers no incentive for departments to look for efficiencies. In some instances, institution-wide cuts are instituted in order to seek efficiencies and reallocate funds for other purposes.

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

Better cost information at course and program levels would help institutions strengthen their linkages between planned objectives and funding. At the same time, sharing this information with ministry staff would help the ministry more accurately determine the funding needed to support educational offerings.

Capital funding

The landscape of post-secondary education is changing as the world becomes increasingly interconnected via modern communication technology. To keep up, post-secondary education institutions have to invest in high-speed equipment, software, services and facilities. This is important if they want to compete with education institutions in the province, nation-wide and around the world.

We found that the government is working with institutions to identify needs in relation to growth objectives and to address the physical infrastructure problems that exist. All institutions appreciate the government's investments in post-secondary infrastructure at this time. One institution we visited told us that once its construction projects are complete, its facilities will be generally adequate to meet its growing needs. Some institutions, however, are worried that new growth seats will be allocated to them before their construction projects are complete, placing them at risk of not being able to meet their targets in the timeframe established by the plan.

A few institutions we met with do not feel that government's current investment at their institution is enough to meet their needs. Since the "Access for All" initiative to expand the size of British Columbia's public post-secondary education system more than 15 years ago, only limited facilities and equipment development has taken place within the system. As a result, some of the province's institutions are showing their age and are in need of modernization, and interviewees we met at some institutions expressed concern that their facilities and equipment (having been stretched far beyond their serviceable life) are now hampering the

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

quality of instruction and work environment they are able to offer students, faculty and staff.

Few institutions have formal human resource succession plans

Planning and management of staff recruitment and retention are critical if institutions are to achieve their growth targets under the 25,000 seat expansion plan. Institutions will not be able to adequately support increased student enrolment if they do not have sufficient and appropriate faculty and staff.

According to research conducted by the Social Sciences and Humanities Research Council and the Association of Universities and Colleges of Canada, Canadian public post-secondary education institutions (particularly universities) will experience a turnover of more than 30,000 faculty members in the next decade.¹⁰ In light of this, recruitment and retention within the ranks of Canadian academe is becoming a serious issue for all concerned about the future of post-secondary education in Canada.

While all of the institutions in our sample recognize the importance of faculty and staff recruitment and retention, few have developed comprehensive human resource succession plans. Some institutions have successfully hired new faculty, but these efforts are not keeping up with the number of faculty who are leaving. Teaching demands are therefore reportedly under pressure as are administrative responsibilities.

Starting salaries for faculty positions are also on the rise in some high-demand professions as educational institutions—as well as the non-academic employment market—compete for the same potential employees. In these high-demand areas, salary compression is also a growing concern as the gap narrows between starting salaries and salaries being paid at mid- and senior levels.

Institution enterprise-wide risk planning and management are weak

As we outlined in our audit findings about the ministry, risk identification and management support efficient and effective

¹⁰ Giroux, Robert, President, Association of Universities and Colleges of Canada. *Presentation to House of Commons Standing Committee on Human Resources Development and the Status of Persons with Disabilities: Roundtable on Access to Post-secondary Education*. Ottawa, May 29, 2001.

Planning and Resourcing for Growth: Findings of the Post-secondary Institution Audit

Enterprise-wide Risk Management

Enterprise-wide risk management is defined as a disciplined approach to managing risk exposures (across an entire organization) in an integrated, holistic and continuous process. The objective is to approach the identification and treatment of risks in a rigorous manner, to identify opportunities, to maximize strengths and address vulnerabilities that could impede success.

The concept of enterprise-wide risk management evolved through the 1990s, led by standards established in Australia and New Zealand (standards referred to as AS/NZS 4360:2004) and further developed by bodies such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the United States, and the Institute of Chartered Accountants (CICA) in Canada. In September 2002, the Ministry of Finance in British Columbia introduced a government policy on the practice, adopting the Australian standards for use within the B.C. public sector.

achievement of results. The concept of “enterprise-wide risk management” (see sidebar) is gaining recognition in the public sector as a key component of effective governance and management practice.

Given all of the factors that institutional planning for growth and access must consider, we believe that enterprise-wide risk management should be an integral component of institutional planning and management. However, it is a relatively new concept, so we did not expect institutions to have fully adopted the practice. We simply looked for evidence that they were aware of the need for enterprise-wide risk management and were taking steps towards introducing the concept internally.

We were therefore pleased to discover that one of the institutions in our sample has in fact already adopted the concept of enterprise-wide risk management and two institutions have started to develop risk registries that identify organization-wide risks. Although these registries require further growth and development, it is a good start. A fourth institution identified the need for enterprise-wide risk management in its insurance risk management report, demonstrating that staff are aware of the need for a more holistic approach.

As for the remaining institutions, we found that they simply identify and address risks informally. This lack of formal plans and processes in place to manage organizational risks is of concern because potentially identifiable risks may be going undetected and untreated, and institutions could be doing much more to formally identify and manage their risks in order to achieve objectives such as student seat growth.



Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

The most critical information needed to monitor success in this expansion initiative is the number of seats overall and the number by institution, region and priority program relative to the objective of the plan. We expected to find that the ministry and institutions were closely monitoring enrolment, verifying and analyzing results and reporting performance to the public. We also expected them to be developing and implementing adjustment strategies as necessary to meet their objectives. Performance information is only meaningful if organizations actually learn and make use of the information. Often this means looking more closely at shortfalls and creating strategies to improve.

The number of seats is being closely monitored

A New Method of Calculating FTEs

In 2005, the ministry introduced a new method for calculating student FTEs in the college sector. This was a major undertaking that was done to ensure a more comprehensive and comparable count. The 2005/06 year is the first year of reporting under this new method. To ensure valid trend information the ministry recalibrated the 2003/04 and 2004/05 FTEs. The targets stayed the same – just the base changed – and all of this was well explained in the 2006/07 ministry service plan.

The ministry clearly communicated to all institutions the number of full-time equivalent (FTE) student seats it expected to be delivered each year for the entire six years of the initiative, and progress is closely monitored by both the ministry and institutions. Annual targets are confirmed or adjusted every year in the institutions' Budget and Accountability letters, which are available to the public on the ministry's website. In these letters, both the total number of FTEs as well as a breakdown of FTEs for the priority program areas are provided. As well, the ministry conveys the targets for the entire system in its annual service plan and service plan reports.

All institutions we examined are able to track their student FTEs closely through their student information systems. Institutions monitor enrolment at key points during the year: summer, fall and fiscal year-end. This allows them to react as necessary to accommodate student numbers that are more or fewer than expected.

Institutions submit enrolment reports to the ministry twice a year as part of their accountability requirements. In the fall, the ministry receives interim enrolment reports (these are not audited), and at the end of the fiscal year (in the spring) it collects final enrolment reports (these have been audited). The reports are used by the ministry to monitor institutional performance.

Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

More rigorous analysis of results and trends is needed

Accountability Reporting in British Columbia's Post-secondary Education System

The *Budget Transparency and Accountability Act* requires all ministries and Crown agencies to prepare annually: 1) service plans that outline what their organizations intend to achieve; and 2) service plan reports that describe what was actually achieved. However, a number of provincial public sector organizations, including post-secondary education institutions, are excluded from the provisions of this act. In other work of this Office, we have recommended that these organizations should be included in the Act (For example, see *Building Better Reports: Our Assessment of the 2004/05 Annual Service Plan Reports of Government: Report 10*, available at www.bcauditor.com).

We were encouraged to see that despite this exclusion post-secondary institutions are—under a 2003/04 accountability directive from the Ministry of Advanced Education—required to produce (and make public) service plans and service plan reports. The first service plans were submitted to the ministry in April 2005 and the first service plan reports were submitted in the summer of 2005.

Tracking enrolment, although key, is only the first step in measuring performance results. The institutions and the ministry must find out what factors are influencing student enrolments so they can determine what changes are necessary to improve results. Despite monitoring efforts, softening enrolment in 2004/05 came as a surprise to the ministry and most of the institutions we examined. They did not predict it or create plans or strategies to deal with it, and little was known about the possible concerns or causes. A more rigorous analysis of the factors that affect enrolment would help the ministry and the institutions be better prepared to understand and manage these factors in the future. The ministry may have to play an enhanced role in coordinating some of the research work being carried out by individual institutions—particularly at the college and institute level.

Public reporting could be more transparent

Institutions and the ministry publicly report, in annual service plan reports, the progress they are making towards achieving their enrolment targets (see sidebar). These reports are publicly available on both the ministry's and the institutions' websites (although they are often difficult to find on the latter). We found that most of these reports only provided results for one year and did not provide any historical or trend information about enrolment. We believe such information would make these reports more meaningful.

We also noted an issue with how the ministry measures the progress of the 25,000 seat initiative. When the ministry implemented the 25,000 seat growth plan, the starting point it established to measure performance was grounded on the number of seats it provided funding for in the year prior to the launch of the initiative (fiscal year 2003/04). We believe that a better baseline would have been the actual number of FTEs delivered in that year. When we assessed progress using the actual number of FTEs as a baseline, we found that if the institutions deliver the number of FTEs the ministry has requested, the total will be 23,914 actual FTEs, that is 1,086 less than 25,000 (Exhibit 10).

Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

Exhibit 10

Funded versus actual full-time equivalent growth if target for 2010 achieved

	Ministry Base (Funded FTEs)	OAG Suggested Base (Actual FTEs)
2003/04 Baseline	154,699	155,785
Growth Target	25,000	
2009/10 projected total FTEs (base + 25,000)	179,699	177,285 (Difference = 1,086)

Finally, we observed that the ministry did not include a performance measure or target for its regional equity principle. Given the importance of this policy objective, establishing a performance measure for this objective for use in future service plans and service plan reports would be both useful and informative.

The ministry and the institutions recognize further adjustments are needed to meet the 25,000 seat objective

The ministry and the institutions we reviewed are all in the process of making adjustments to better meet their enrolment targets. While some adjustments have already been made, all the organizations in our sample acknowledged that further adjustments are needed if the 25,000 seats are to be delivered by 2010.

A review of the results to date explains why further adjustments are likely necessary. Only 8 of 26 institutions were able to achieve their growth targets for the first two years of the initiative (Exhibit 11). We do recognize that it is still early days for the initiative, and that these results are not necessarily indicative of what we will see over the remaining four years. In fact, in 2005/06, results were better than in 2004/05. (Final audited results for 2006/07 are not yet available.)

Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

Exhibit 11

Targeted and actual full-time equivalents by post-secondary institution in British Columbia, 2004/05 and 2005/06 combined

	Baseline (2003/04 actual)	Targets (Baseline plus 2004/05-2005/06 growth)	2005/06 Actual	Difference
Universities				
Royal Roads University	2,053	2,093	1,850	-243
Simon Fraser University	18,167	19,223	18,927	-296
Thompson Rivers University ^a	7,132	6,954	6,822	-131
University of British Columbia ^b	34,024	39,471	37,642	-1,829
Univ. of Northern British Columbia	2,943	3,246	2,902	-344
University of Victoria	14,830	15,679	15,497	-182
Institutes				
British Columbia Institute of Technology	9,664	10,024	12,738	2,714
Emily Carr Institute of Art and Design	1,079	1,094	1,155	61
Institute of Indigenous Government	128	128	133	5
Justice Institute of British Columbia	202	209	221	13
Nicola Valley Institute of Technology	183	201	263	62
University Colleges				
Kwantlen University College	8,480	8,936	8,064	-872
Malaspina University College	5,356	5,621	5,226	-395
Okanagan University College ^c	6,386	3,843	3,618	-225
University College of the Fraser Valley	5,267	5,520	5,907	387
Colleges				
Camosun College	5,491	5,608	5,460	-148
Capilano College	4,982	5,095	4,847	-248
College of New Caledonia	2,432	2,486	2,246	-240
College of the Rockies	1,423	1,479	1,656	176
Douglas College	6,870	7,110	6,746	-364
Langara College	5,924	6,051	5,284	-767
North Island College	1,890	1,934	1,684	-250
Northern Lights College	1,278	1,309	1,274	-36
North-West Community College	1,273	1,299	1,167	-132
Selkirk College	1,813	1,903	1,930	27
Vancouver Community College	6,516	6,687	6,530	-157
TOTAL	155,786	163,202	159,789	-3,413

^a Includes former University College of the Cariboo and Open Learning Agency

^b Includes University of British Columbia - Okanagan

^c Okanagan University College FTE's were reallocated to UBC - Okanagan and Okanagan College.

Source: Created by Office of the Auditor General of BC from data supplied by Ministry of Advanced Education

Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

According to the ministry, its primary mechanism for making the adjustments necessary to meet the 25,000 FTE target is its ability to reallocate FTEs among institutions. As shown in its 2005/06 Budget and Accountability letters to the institutions, it was already considering “minor” reallocations, either across regions or by institutions—a step it subsequently took (after reviewing the results from 2004/05) to achieve the 2006/07 FTE targets (see Exhibit 12). Before making any future reallocations, the ministry plans to assess the situation more closely. However, given the results to date (Exhibit 11), reallocations alone will not likely resolve all of the challenges, particularly the challenge of softening enrolment. But reallocations can help ensure a better match between seat allocations and student demand.

Exhibit 12

Full-time equivalent (FTE) reallocations by post-secondary institution in British Columbia

Type of Institution	Original 2006/07 FTE allocations	Adjusted 2006/07 allocations	Difference
Institutes			
British Columbia Institute of Technology	148	163	15
Emily Carr Institute of Art and Design	34	54	20
Justice Institute of BC	0	20	20
Nicola Valley Institute of Technology	8	15	7
Rural Colleges			
College of New Caledonia	87	67	-20
College of the Rockies	99	69	-30
North Island College	52	45	-7
Northern Lights College	55	45	-10
Northwest Community College	56	51	-5
Urban Colleges and University Colleges			
University College of the Fraser Valley	395	405	10
Total	934	934	0

Source: Created by the Office of the Auditor General of BC from data supplied by the Ministry of Advanced Education

Reallocating FTEs among institutions to match student demand may sound reasonable and easy to do, but in fact such adjustments are challenging. One difficulty is that options for reallocations are limited by one of the ministry’s key objectives—regional equity. Almost all of the reallocations to date have been from rural to urban

Monitoring, Reporting and Adjusting for Growth: Findings of the Ministry and Institution Audits

institutions. Should this pattern continue, the ministry will be faced with increasing inequality in the availability of post-secondary education between rural and urban locations.

Another difficulty associated with reallocations is that FTEs are linked to funding. Institutions have created growth plans and new programs based on the assumption that they will be provided the incremental FTEs (and associated funding) that the ministry notionally provided to them in the first year of the initiative. The investments in time and resources being made by the institutions mean that any hint of reallocation causes anxiety. For this reason, even the minor reallocations to date have needed to be negotiated. Each institution agreed to accept fewer FTEs in exchange for equivalent, one-time funding.

In the institutions that were unable to meet their 2004/05 enrolment targets, we found that all of them were making or planning to make adjustments to better meet their future targets. Our visits occurred shortly after the 2004/05 results were available so the colleges and university colleges were only just beginning to assess the causes behind softening enrolment and develop strategies to deal with it. One of the most common adjustments we noted was the introduction of new programs to better meet student needs. At the college and institute level, some two-year certificate programs are being converted into applied degree programs. Many institutions feel it is crucial to develop new programs if enrolment targets are to be met in the long term. However, we also heard that obtaining approval for new degree programs has not been easy for some institutions. Several program requests were turned down by ministry staff if the proposing institutions were not meeting their enrolment targets. The ministry wanted to make sure that new applied degree programs were not being added at the expense of existing programs. This practice has since ceased.



Management Response

Management Response

Thank you for providing Post-Secondary Education Institutions and the Ministry of Advanced Education with the opportunity to respond to the Office of the Auditor General's (OAG) "Government's Post-Secondary Expansion — 25,000 Seats by 2010" review.

We would like to commend the authors of the report for taking the time to review and understand the very complex issue of planning in the British Columbia post-secondary system. We would also like to recognize the value of undertaking such a review at the start of a major government initiative. This ensures that comments and recommendations can be considered as part of ongoing management of the initiative.

Access to post-secondary education supports many of government's social and economic priorities. The post-secondary education system and the Ministry together remain committed to the three main components of the Strategic Investment Plan, namely:

- *Enhancing public post-secondary access opportunities province-wide;*
- *Targeting funding for specific programs to meet current and emerging provincial social and economic priorities; and*
- *Improving programs and strategies to support and encourage access for under-represented groups such as new immigrants and aboriginal learners.*

Given the scope and importance of the Strategic Investment Plan, we were pleased that the audit report confirms the fundamental premise underlying the Plan: that the combination of demographics, labour market demand, and growth of the knowledge economy will continue to create increased demand for post-secondary education until at least the middle of the next decade. The Strategic Investment Plan was a major step forward in terms of developing a proactive, long-term approach to identifying and meeting that demand.

We also recognize and agree that there is still work to be done to ensure progress continues towards achieving the Strategic Investment Plan. Long term plans must be carefully monitored and responsive to changing circumstances.

Management Response

Our response to the audit report considers three major themes: development, implementation and management of the Strategic Investment Plan; funding of the Plan; and the results the Plan is intended to achieve.

Development, Implementation, and Ongoing Management of the Strategic Investment Plan

Given the complexities of the external and internal environments related to post-secondary education, we are pleased that the audit report confirms that we “are increasing access to post-secondary education in a manner that is consistent with good business management and with government’s vision for post-secondary education”.

The audit report states that risk management practices associated with the Strategic Investment Plan can be strengthened. We agree that there is always room for improvement in this area. In particular, we agree that the Ministry can and should take a leadership role, as the factors which influence the Plan are many and complex.

We believe it is important to note that risk identification and management takes many forms, not all of which are reflected in formal enterprise-wide risk management plans. The Ministry and the post-secondary institutions, as partners in the Strategic Investment Plan, have undertaken a number of actions, such as enhanced monitoring, reporting and discussion; greater collaboration; strengthening approaches to student recruitment and retention; feasibility analysis and development of new programs; review of ongoing programs; and continual assessment of the policy metrics underlying the Plan.

The audit report points to institutional human resource succession plans as a key element associated with risk management. We agree that planning for upcoming demographic changes, programmatic changes, and student growth is essential. It is worth noting, however, that planning for faculty does not lend itself to a pure “succession plan” approach, as future needs for faculty are also driven by decisions on educational programming rather than simply replacement of existing faculty.

Management Response

We also believe it is critically important to distinguish between cyclical and structural factors which affect the Strategic Investment Plan. As a long-term plan focused on achieving an end-state some six years in the future, we need to focus on those elements which pose a risk to the long-term goal of increasing access to post-secondary education. While Plan implementation must be informed by shorter term factors, they should not drive long-term Plan management. The Ministry and institutions will work together to identify and manage those elements which pose structural challenges to the Plan.

Funding the Strategic Investment Plan

As the audit report states, the model for government funding of public post-secondary institutions is “modified block funding”. The institutions and the Ministry believe this is an appropriate model for the post-secondary system in British Columbia, which is characterized by a high degree of institutional autonomy. The funding model enables government to direct resources to a small number of high priority program areas, while allowing institutions the flexibility to allocate the majority of their operating funding in response to demand. This model was supported in two recent independent reviews (The Post-Secondary Budget Review, Phase I and Phase II).

We agree that transparency can and should be increased regarding the funding model and funding decisions. We intend to build on the steps taken in the past several years. For example, a pre-budget consultation meeting between the Ministry and post-secondary representatives was introduced this year; the consultation process will be refined next year.

The audit report states that the Ministry should have more and better information regarding the cost of post-secondary programs. We agree, to a point. We agree that where government funding is directed to particular priority programs (e.g., nursing, medicine, computer science and computer engineering), understanding the cost of program delivery is critical to ensuring that these programs are funded appropriately. We also agree that it would be useful to have a clearer picture of the overall cost of program delivery and the revenue sources which cover those costs. However, the audit report appears to go further, suggesting that in-depth knowledge of costs for a wide range of programs is required by the Ministry. Given that

Management Response

there are thousands of programs, we believe that would not be a prudent use of Ministry resources, or an appropriate reflection of the nature of British Columbia's post-secondary system.

The audit report also observes that funding for inflationary costs varies from year to year. This issue was also raised in the Post-Secondary Budget Review. The Ministry recognizes that this presents budget management issues for institutions. However, it is also important to note that under the 2005/06 to 2009/10 Negotiating Framework, government will fund all costs of collective agreement settlements (salaries and benefits typically account for 70 to 80 percent of institutions' operating cost bases).

Results of the Strategic Investment Plan

We appreciate the audit report's overall conclusion that "a majority of the 25,000 new seats will be filled with students by the target 2010 year." We also recognize that, based on the first two years of implementation, the Plan is indeed slightly behind. The Ministry and institutions will continue to work in close collaboration to ensure that the Plan meets its overall objective of increasing access in all areas of the province.

Based on the information that was available in late 2003 when the Plan was being developed (including 2002/03 utilization rates), the policy objectives and allocations were reasonable. As the audit report points out, labour market demand, student demand, and population growth all pointed to the need for a long-term planned expansion of the system. The Ministry and institutions will continue to undertake proactive measures to ensure that the Plan remains responsive to structural factors and to emerging priorities, such as graduate students, aboriginal access, and skilled trades, thereby enhancing the chances of success.

Delivery of student FTEs is a key measure of progress. In our view, Ministry and institution service plans and service plan reports present information in a clear and transparent fashion, augmented by additional planning and reporting information on institutional websites. In that regard, we do not agree that the baseline for measuring achievement of the 25,000 spaces should be the actual number of FTEs delivered in 2003/04. We believe this would be misleading, as the Ministry funded only the number of

Management Response

FTEs reflected in institutions' targets. The accountability model is based on holding institutions accountable for delivering Ministry-funded FTEs; therefore the Plan is built on 2003/04 funded FTEs. The presentation in the Ministry Service Plan Report does allow readers to assess progress against 2003/04 actual FTEs and against the overall system target.

Focusing exclusively on the overall system results also misses an important distinction between sectors. The university sector continues to exceed its annual FTE targets, helping meet the goal of reducing GPA entrance requirements. There is more variation in the college sector, with some institutions ahead of schedule and the majority slightly behind. The college sector generally has faced challenges in both demand (the strong economy is attracting individual into the labour force) and supply (only one college sector institution has received a permanent funding adjustment to recognize the impact of the tuition limit – this issue is currently under consideration by government).

Conclusion

We appreciate the Office of the Auditor General initiating the review of the Strategic Investment Plan during the first phase of its implementation. Many of the comments and recommendations contained within the report will inform ongoing management of the initiative. We will, in a collaborative fashion, continually assess the Plan to ensure that its objectives remain relevant and that it is responsive to changing structural influences.

In doing so, we will keep in mind the broader objectives of the Plan, such as enhancing access throughout the province, targeting growth of priority programs, and enhancing access for under-represented groups. Focusing exclusively on delivery of student FTEs tends to obscure the larger picture and the achievement of outcomes rather than outputs.

Again, we appreciate that the audit report's overall conclusion is positive and confirms that: the fundamental rationale for the Plan is sound; it is being managed in an appropriate manner; and it is likely that a majority of the new student spaces will be filled by 2010.

Management Response

We would like to thank OAG staff for their efforts to understand the business of such a diverse range of post-secondary institutions. It is a difficult task to summarize issues and propose over-arching recommendations for such a complex system.

We would also like to take this opportunity to recognize the tremendous efforts of Ministry and institution staff to help make the Strategic Investment Plan a success.



Appendices

Appendix A: Original Student Full-time Equivalent Allocation Targets by Institution

Institution	2003/04 Target	2004/05 Growth	2005/06 Growth	2006/07 Growth	2007/08 Growth	2008/09 Growth	2009/10 Growth	Total Growth	Total Seats
BC Institute of Technology	9,269	194	166	148	209	209	219	1,145	10,414
Camosun College	5,856	82	35	96	112	112	113	550	6,406
Capilano College	5,424	77	36	65	57	57	58	350	5,774
College of New Caledonia	2,905	23	31	87	86	86	87	400	3,305
College of the Rockies	1,430	21	35	99	98	98	99	450	1,880
Douglas College	6,889	99	141	331	311	311	307	1,500	8,389
Emily Carr Inst. of Art and Design	1,061	5	10	34	34	34	33	150	1,211
Inst. of Indigenous Govt.	129	0	0	0	0	0	0	0	129
Justice Institute	206	4	3	0	1	1	0	9	215
Kwantlen University College	8,274	162	294	349	332	332	331	1,800	10,074
Langara College	5,649	80	47	73	100	100	100	500	6,149
Malaspina University College	5,696	132	133	221	205	205	204	1,100	6,796
Nicola V. Institute of Technology	228	10	8	8	8	8	8	50	278
North Island College	2,266	20	24	52	51	51	52	250	2,516
Northern Lights College	1,569	15	16	55	55	55	54	250	1,819
Northwest Community College	1,649	14	12	56	56	56	56	250	1,899
Okanagan University College	3,604	50	190	190	190	190	190	1,000	4,604
Open Learning Agency	2,654	-390	0	-16	-16	-16	-16	-454	2,200
Selkirk College	2,222	38	52	40	40	40	40	250	2,472
University College of the Cariboo	5,409	125	87	135	134	134	135	750	6,159
Univ-College of the Fraser Valley	5,185	87	166	395	351	351	350	1,700	6,885
Vancouver Community College	6,990	70	101	100	110	110	109	600	7,590
Total Non-Universities	84,564	918	1,587	2,518	2,524	2,524	2,529	12,600	97,164
Royal Roads University	1,850	20	20	40	40	40	40	200	2,050
Simon Fraser University	16,850	639	417	437	501	501	505	3,000	19,850
UBC Vancouver	31,444	945	865	184	69	69	68	2,200	33,644
UBC Okanagan	3,000	126	728	912	912	912	910	4,500	7,500
University of Northern BC	2,811	137	166	60	79	79	79	600	3,411
University of Victoria	14,180	432	417	243	269	269	270	1,900	16,080
Total Universities	70,135	2,299	2,613	1,876	1,870	1,870	1,872	12,400	82,535
Total Growth	3,217	4,200	4,394	4,394	4,394	4,394	4,401	25,000	
% Growth		2.1%	2.7%	2.7%	2.6%	2.6%	2.5%	13.9%	
Total FTES	154,699	157,916	162,116	166,510	170,904	175,298	179,699		

Source: Ministry of Advanced Education

Appendix B: Annual growth rate by post-secondary institution in British Columbia, 1996 / 97 – 2005 / 06

Institution	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
% ^a										
Universities										
Royal Roads University	N/A	32.6	22.8	31.6	43.1	31.7	36.2	6.7	-4.6	-5.5
Simon Fraser University	2.3	1.4	1.6	-0.7	3.1	5.0	8.4	-0.1	1.8	2.3
University of British Columbia	5.7	3.4	2.1	2.2	-0.3	6.4	2.8	2.0	0.7	9.9
University of Northern BC	19.9	12.2	8.5	6.7	1.1	7.6	1.4	2.6	1.0	-2.4
University of Victoria	3.9	3.7	1.2	-0.9	1.0	4.6	-0.5	2.3	1.3	3.1
Total	5.4	3.4	2.1	1.4	1.5	5.8	4.1	1.7	1.0	15.0
Institutes										
BC Institute of Technology	8.5	5.2	8.2	5.7	2.4	2.4	2.5	1.7	3.4	27.5
Emily Carr Inst of Art & Design	0.0	4.8	4.2	1.6	1.1	-1.7	-0.4	9.9	5.7	1.3
Institute of Indigenous Gov't	N/A	N/A	N/A	N/A	-17.3	22.8	51.6	32.4	1.1	3.2
Justice Institute	20.3	628.3	3.1	-10.9	16.8	-14.8	-3.8	0.0	11.3	-1.4
Nicola Valley Inst of Tech.	-14.6	-21.0	4.8	3.3	10.4	12.2	7.8	-8.7	32.5	8.6
Total ^b	5.7	6.4	9.7	5.0	3.9	0.8	1.6	-0.1	2.2	6.5
University Colleges										
Kwantlen UC	5.6	3.1	4.5	3.9	0.6	4.8	3.8	4.2	-3.7	-1.2
Malaspina UC	4.0	1.9	3.9	5.4	3.0	0.6	-1.4	4.5	1.2	-3.6
Okanagan UC	0.3	1.7	0.7	-1.8	-1.6	6.8	5.9	8.6	3.8	-100.0
UC of the Cariboo	-2.4	3.7	1.5	7.4	-0.7	5.0	-2.9	0.7	1.4	-100.0
UC of the Fraser Valley	1.5	12.8	8.2	15.2	1.3	5.0	4.4	-0.7	4.0	7.8
Total	2.0	4.0	3.6	5.4	0.5	4.5	2.2	3.6	0.9	-37.7
Colleges										
Camosun College	3.1	3.3	3.7	-1.6	2.0	-3.2	0.1	1.6	-2.5	2.0
Capilano College	2.6	-1.5	6.0	1.5	-0.9	2.4	1.2	2.0	-1.0	-1.7
College of New Caledonia	4.6	3.3	8.3	9.0	0.0	1.3	-1.4	-4.4	-7.4	-0.3
College of the Rockies	5.1	-0.6	3.8	13.9	-0.4	15.5	4.7	-10.1	-7.8	26.2
Douglas College	4.7	4.2	2.7	3.9	2.5	5.0	1.7	3.3	-6.8	5.4
Langara College	4.6	11.1	5.2	3.8	0.1	2.2	3.3	2.3	-4.8	-6.4
North Island College	-2.3	6.7	6.7	12.4	-5.1	-2.1	0.1	-2.6	-4.0	-7.2
Northern Lights College	-6.6	7.0	23.6	-13.0	2.1	2.3	-7.9	-0.5	-5.4	5.3
Northwest Community College	2.7	-2.6	-5.4	2.9	2.9	11.0	6.1	-12.8	-10.1	1.9
Selkirk College	5.0	5.5	12.7	1.6	1.1	-0.9	-9.0	-4.2	10.3	-3.5
Vancouver Community College	1.1	-2.4	6.1	7.1	0.9	3.1	3.7	-12.9	-0.1	0.3
Total	2.7	2.9	5.7	3.5	0.6	2.4	1.1	-2.5	-3.3	10.0
System Total ^c	4.0	3.6	4.0	3.0	1.3	4.2	2.7	0.8	0.0	2.6

^a Percent growth over previous year, based on "old method" FTE count.

^b Includes some smaller institutions not listed.

^c Excludes Entry Level Trades Training and Apprenticeship.

Source: Audited FTEs, Ministry of Advanced Education

Appendix C: Summary of Reports

Summary of our reports issued in 2006/07

Report 1 – April 2006

Strengthening Public Accountability: A Journey on a Road that Never Ends

Report 2 – September 2006

The 2010 Olympic and Paralympic Winter Games: A Review of Estimates Related to the Province’s Commitments

Report 3 – November 2006

Audit of Treaty Negotiations in British Columbia: An Assessment of the Effectiveness of British Columbia’s Management and Administrative Processes

Report 4 – December 2006

Province of British Columbia Audit Committees: Doing the Right Things

Report 5 – December 2006

Audit of Government’s Corporate Accounting System: Part 2

Report 6 – December 2006

Monitoring Government Finances: Province of British Columbia

Report 7 – December 2006

Government’s Post-secondary Expansion—25,000 Seats by 2010

Each of these reports can be accessed through our website <http://www.bcauditor.com> or requested in print from our office.

