

Report 9: December 2011

SUMMARY REPORT: RESULTS OF COMPLETED PROJECTS

www.bcauditor.com



OFFICE OF THE
Auditor General
of British Columbia



OFFICE OF THE
Auditor General
of British Columbia

Location:

8 Bastion Square
Victoria, British Columbia
V8V 1X4

Office Hours:

Monday to Friday
8:30 am – 4:30 pm

Telephone: 250-419-6100

Toll free through Enquiry BC at: 1-800-663-7867
In Vancouver dial 604-660-2421

Fax: 250-387-1230

Email: bcauditor@bcauditor.com

Website:

This report and others are available on 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: 250-419-6100
Facsimile: 250-387-1230
Website: www.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 to the Legislative Assembly of British Columbia my 2011/2012
Report 9: *Summary Report: Results of Completed Projects*.

My Office undertakes a number of projects each year that do not result in traditional public reports. For reasons unique to each piece of work, these projects do not need to be the subject of a traditional report to be beneficial. However, to be accountable for this work, we summarize the most important findings and recommendations from these performance audits and reviews in an annual public "summary report."

This is the second summary report issued by my Office. It includes summaries of six audit projects covering topics such as government fees, the Family Maintenance Enforcement Program, post-secondary and special education, and wireless security.

John Doyle, MAcc, CA
Auditor General

Victoria, British Columbia
December 2011

TABLE OF CONTENTS

Auditor General's Comments	5
Summaries	
Organizational Costing of Fee-Based Goods and Services	7
Family Maintenance Enforcement Program	11
Management of Student Loans	13
Managing for Results: Post-Secondary Accountability Framework Audit	15
Accountability for Special Education Services	18
Wireless Networking Security: Phase 3	22



JOHN DOYLE, MAcc, CA
Auditor General

A SIGNIFICANT AMOUNT OF WORK is done, and results achieved, outside of my Office's public reports. Our audit teams work closely with (but independent of) management in public sector entities, such as ministries and Crown corporations. Communication is consistent and transparent: as a result, management is often aware of our general findings early on in the engagement process. In some cases, management is able and willing to begin addressing our findings during the engagement itself. Other times, our findings can be so numerous, specific and/or technical in nature that they are not suitable for a public report, but are of great value to the organization we are auditing.

In these instances, "management letters" are often used to convey the results of our work to senior management. These letters are formal products from the Office and are intended to give organizations a very detailed account of the project, findings and recommendations so that they may be recognized for their existing good practices and improve on any issues identified.

Where appropriate, the results of management letters are relayed to legislators and the public in various ways. For financial audits relating to the Province's Summary Financial Statements, we publish a summary of management letter issues in our *Observations on Financial Reporting* report. For performance audits and reviews, we summarize the most important findings and recommendations from our management letters in this summary report. Reporting on our work through this summary report allows us to be publically accountable for our use of public sector resources.

This report includes summaries of six pieces of work. As is apparent when reading the summaries, and for reasons unique to each piece of work, these projects did not need to be the subject of a traditional public report to be beneficial to each organization.

AUDITOR GENERAL'S COMMENTS

As detailed in [Organizational Costing of Fee-Based Goods and Services](#), we found a lack of transparency around government's fee-setting and approval process. This includes fees for items such as birth certificates, drivers' licence renewals, tuition and fishing licences. Of the 2,332 fees currently tracked, nearly 30% have not been revised in over a decade.

Through our audit of the [Family Maintenance Enforcement Program \(FMEP\)](#) we identified a number of weaknesses with the accountability framework with respect to poor contract management practices that are exposing the ministry, the program and the contractor to unnecessary reputational risk. Conversely, we also found that the FMEP ensures prompt enrolments and payments, accurate records, and appropriate enforcement actions.

This summary report also includes our work on [Accountability for Special Education Services](#). Approximately 60,000 students in British Columbia's public education system are identified as having special needs – 10% of the total student population. We observed a high level of commitment to special education by the three school districts that we visited, as well as several opportunities for improvement. All three school districts have since made changes to some of their practices as a result of our examination process.

Finally, government organizations increasingly rely on wireless technologies to deliver services, provide access to information and improve communication and collaboration. My Office has conducted a series of audits of government's wireless networking security since 2009. [Wireless Networking Security: Phase 3](#) provides a high-level summary of our findings at Camosun College and the University of British Columbia.

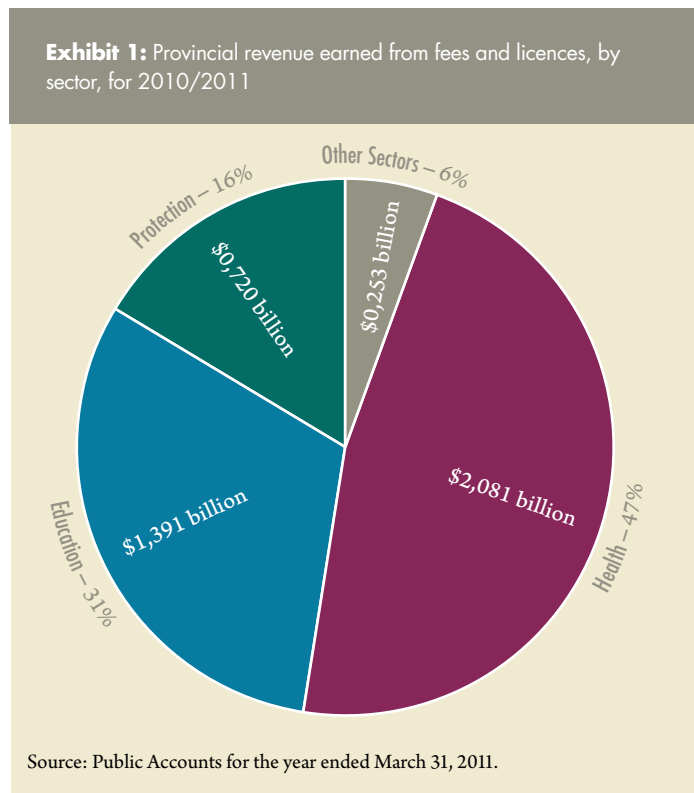
I would like to thank the many people from the various organizations involved in each of these projects for their assistance and professionalism. Publishing this summary report allows me to recognize the good work being done in government, which may not otherwise be introduced into the public realm. All of my Office's work is made the more successful by building and maintaining positive working relationships with the public servants of this province.



BACKGROUND

The provincial government generates revenue from fees and licences paid by British Columbians across a wide range of sectors: health (e.g. birth, death and marriage certificates and ambulance fees); education (e.g. university and college tuition); and natural resources (e.g. fishing licences and park use permits). Other sources include fees for driver's licences and court services.

As shown in Exhibit 1, the health and education sectors together account for almost 80% of all revenues earned from fees and licences in British Columbia for the year ended March 31, 2011.



The revenue earned from fee collection totalled more than \$4 billion annually in each of the last three years, 2008/09 to 2010/11. In 2010/11, fee-based goods and services accounted for 11% of all provincial revenue.

Treasury Board Staff provides guidance to provincial entities on how to apply to establish a new fee or to change an existing fee, as well as how to calculate the costs related to each. In general, these fees fall into two broad categories:

- ◆ *Revenue fees* can be set with a possibility to earn a profit above the actual cost of delivering the good or service.
- ◆ *Recovery-to-vote fees* are set only to recover the full or partial cost of delivering the good or service.

Fees charged by government reflect a policy decision intended to influence the behaviour of users of those goods or services. For example, charging less than the actual cost of the item can help subsidize a social policy or encourage a desirable behaviour

Treasury Board Staff

Treasury Board Staff, a group within the Ministry of Finance, is responsible for developing and reviewing government's economic and fiscal policies. It provides analysis and advice to the Treasury Board (the Cabinet committee responsible for budget and management matters) and to the Ministry of Finance so they can make informed decisions on spending, budget priorities and the government's fiscal and capital plan.

Treasury Board Staff regularly converts Treasury Board's direction into strategic and operational plans and makes recommendations designed to promote the effective and efficient use of public resources.

(e.g. university tuition fees being set at less than actual costs to encourage student participation in advanced education). Other fees are charged to discourage undesirable behaviours (e.g. \$50 fee for calling an ambulance when it is not required or when it is refused).

Regardless of the rationale behind a fee, an appropriate and consistently applied costing model should be used to determine the actual cost of a good or service and the resulting fee. An appropriate costing model ensures that government is not unintentionally subsidizing specific activities (and thereby reducing resources available to other public services) or unintentionally overcharging (and inadvertently taxing the users of that good or service).

PURPOSE AND SCOPE

The purpose of our audit was to determine whether the Province is using appropriate costing models to make fully informed decisions in setting fees for goods and services. We also examined whether the models in use are being consistently applied, and if the fee-setting process is transparent to all stakeholders, including the general public.

To conduct the audit, we identified good practice principles and criteria that should be included in fee-setting and cost-calculating processes. Against these good practice expectations, we then evaluated the current guidance provided by government and the process followed by entities requesting a new fee or a change to an existing fee. We reviewed 14 different fees and tested five in detail.

While our sample size was not sufficient for us to draw conclusions on all fees being charged by government, it allowed us to assess the effectiveness of the guidance in ensuring that appropriate and consistent costing information is being provided with the fee applications.

OVERALL CONCLUSION

We concluded that government's current fee-setting guidance is not sufficient to ensure that public sector entities are using appropriate costing models, or are applying them consistently across all sectors.

KEY FINDINGS

Treasury Board Staff guidance

Overall, we found that Treasury Board Staff provide extensive guidance to organizations seeking to collect or revise existing fees. The one area in which more detailed guidance would be beneficial is around the costing information that underlies fee submissions.

More detailed instructions are needed about what costs, and how much of each one, an organization should include in determining the actual cost of delivering the good or service in question. Clearer guidance would ensure that submissions to Treasury Board are more accurate, complete, appropriate and consistently calculated.

Currently, applicants are not instructed on which overhead or "common costs" to include, or how to allocate a reasonable proportion of these costs to a specific good or service. For example, many organizational costs (such as rent or executive salaries) benefit multiple departments. Therefore, only a portion of those costs should be allocated to a department when it is calculating the cost of delivering a good or service.

Applying standardized guidance across government would also make it easier to compare fees and assist government in making better informed decisions about various charges.

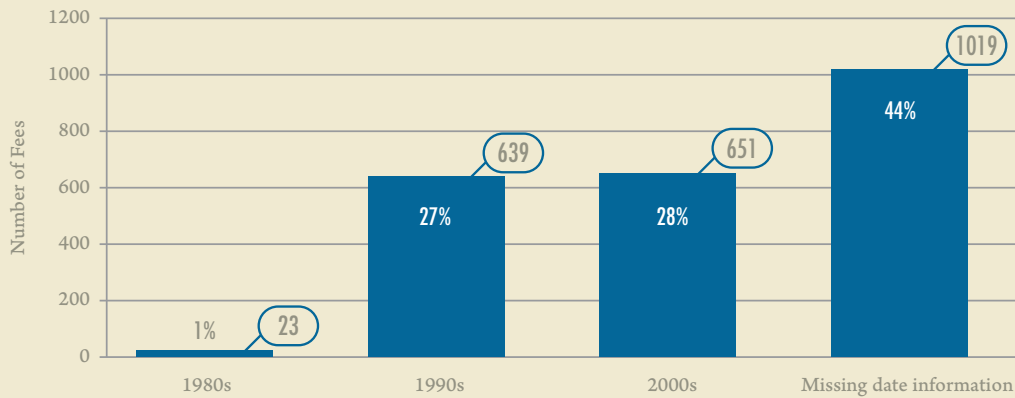
Better guidance is also needed to specify who is responsible for periodically reviewing fees to ensure they remain appropriate over time. For instance, we found that the fees charged to issue a birth, death or marriage certificate have been \$27 per certificate since 1996, when the identified cost of issuing the certificates was \$19.47. It is likely that the cost has changed over the last 15 years.

Of the 2,332 fees currently tracked on the Treasury Board Staff's "master list of fees," nearly 30% have not been revised in over a decade (see Exhibit 2).

Master list of fees

Treasury Board Staff's master fee list includes a wide range of information and requires significant effort by Treasury Board Staff to maintain. Still, we found the information on the list to be incomplete: of all the fees, nearly half do not show the date the fee was created or last revised.

Exhibit 2: Breakdown of 2,332 fees by year created or last revised



Source: Compiled by the Office of the Auditor General of British Columbia from the Treasury Board Staff fee listing.

As well, the master list does not track the date that the costing information underlying a fee was last reviewed. In the absence of such a review, fees charged can become outdated as a result of inflation, the impact of technological developments, and changes in business processes. Unintentionally, government may end up overcharging users on fee recovery or, just as serious, subsidising fees (a cost borne by all taxpayers).

Transparency

Guidance to government organizations seeking to collect fees or revise their existing fees is provided by Treasury Board Staff on the board's internal website. This guidance is not available publicly, and the public is not commonly informed of the actual cost to government of the goods and services for which fees are being collected.

For example, we found that the Insurance Corporation of British Columbia (ICBC) collected, on behalf of the Province, \$36.5 million in 2010/11 (compared with \$35.4 million in 2009/10) from the \$75 driver's licence issuance and renewal fee. The most recent information related to this fee indicates that issuing licences actually costs ICBC only \$10 per licence. ICBC receives no portion of the revenue to offset this expense.

Furthermore, while provincial policy allows government to charge fees in excess of actual cost, the \$75 charged for a \$10 cost in this example appears to represent a significant profit.

Lack of transparency about government's fee-setting and approval

process does not allow stakeholders receiving the goods or services to understand the rationale for each fee, or to hold government accountable for those charges.

RECOMMENDATIONS

We recommended that Treasury Board Staff improve its guidance to:

1. Include detailed instructions for government organizations on the appropriate costs to consider when determining the actual cost underlying a fee request, including how to allocate an appropriate portion of any common or overhead costs.
2. Specify how frequently fees should be reviewed, and what the review procedures should entail.

We recommended that government:

3. Assign responsibility for regularly reviewing fees to ensure that fees remain appropriate and consistent with all relevant government policies and regulations.
4. Assign oversight responsibility for the fee-review process to ensure that those organizations assigned responsibility for regular review of fees are completing these reviews on a timely basis.
5. Develop a plan to review its fee amounts and types to ensure they are appropriate and relevant.
6. Ensure that the fee-setting process and the detailed rationale for the fees charged be transparent and readily available to the public.

LOOKING AHEAD

Fee-setting is an important policy tool used by government. Fee revenues could become even more important in the future if a significant portion of the population retires and payroll taxes and other major sources of government revenue decline. The fee-setting process must be effectively managed and transparent so that stakeholders understand how fees are calculated and can hold government to account for its fee-setting decisions.

We will continue to follow developments in this area.

We would like to acknowledge Treasury Board Staff for their cooperation and assistance during the audit, and for having already addressed recommendations two and three above after receiving our management letter in March 2011.

PROJECT TEAM

Malcolm Gaston,
Assistant Auditor General

Chris Newton,
Manager

Paul Nyquist,
Director

Melissa Kortum,
Assistant Manager



BACKGROUND

The Family Maintenance Enforcement Program (FMEP) was created by the Ministry of Attorney General in 1989. The purpose of the program is to monitor and enforce family maintenance orders or agreements. A maintenance order is a court order requiring one person (the payor) to provide payments to another person (the recipient) for child support and/or spousal support. An agreement is a document signed by a payor and a recipient and filed in a court, stating that maintenance will be paid for children and/or a spouse.

Anyone who has obtained a valid maintenance order or agreement can enrol in the program. It is not just for those situations in which maintenance has not been paid. Many recipients enroll because it is easier to have the FMEP collect and track payments.

In 2009/10, the FMEP served approximately 84,000 parents and 67,000 children, and collected \$173.5 million in maintenance payments. On average, recipients receive close to \$400 per month, but late or missed payments are a concern. For 2009/10, the majority of recipients (83%) received some payment; and in 41% of cases, the total amount outstanding was reduced. In 2009/10, the FMEP collected \$1.97 million in default fees.

Administration of the FMEP is contracted out to Themis Program Management and Consulting Limited. The contract is managed by the Maintenance Enforcement and Locate Services Branch of the Ministry of Attorney General.

PURPOSE AND SCOPE

In 2009, we began an audit of the effectiveness of the design and delivery of the FMEP in serving the needs of those families and individuals who rely on the program for their well-being. We conducted the work between

June 2009 and March 2010, examining maintenance enrolment and enforcement activities that took place between October 15, 2008 and October 15, 2009. The audit was framed around four questions:

- ◆ Does the ministry have an accountability framework for FMEP?
- ◆ Does the ministry monitor, evaluate and report performance and take appropriate actions to align actual performance with planned performance?
- ◆ Does the ministry ensure prompt collection and payment of maintenance payments, and adequately maintain client information and protect it from unauthorized access?
- ◆ Does the ministry have the resources it needs to meet program goals?

During the audit, we realized we needed to do additional planning to shift our focus to examining the effectiveness of the FMEP based on the outcomes it is expected to achieve and the effectiveness of the governance model for the program. Therefore, the work done to date represents completion of the first phase of the audit, which will inform our planning for the second phase. Our findings to date are not audit conclusions. They were communicated to the Ministry of Attorney General in a management letter.

OVERALL CONCLUSIONS

We found that the accountability framework established by the ministry for the FMEP is not effective. This compromises the ministry's ability to monitor, evaluate and report program performance, and to take appropriate actions to align actual performance with planned performance. We identified a number of weaknesses with the framework concerning poor contract management practices that are exposing the ministry, the program and the contractor to unnecessary reputational risk. With respect to program administration, we found that the FMEP ensures prompt enrolments, accurate records, prompt payments and appropriate enforcement actions.

KEY FINDINGS

Performance management

The Maintenance Enforcement and Locate Services Branch of the Ministry of Attorney General is responsible for managing the FMEP. The branch has a good understanding of what the FMEP is intended to achieve and how the program should serve the public, but an appropriate accountability and performance management system has not been established under the current contract. The effective and efficient management and delivery of the FMEP is not possible without these program controls in place.

The negotiation process underway with respect to the new contract provides the ministry with an opportunity to improve the accountability framework for the FMEP and performance management by:

- ♦ defining goals and objectives for FMEP in business plans, contracts and performance reports;
- ♦ establishing contractually binding performance measures and targets; and
- ♦ improving the usefulness and accuracy of management reports to support performance management.

Contract management

We reviewed the contractual relationship between the ministry and Themis and found that it was being managed informally, exposing the ministry, program and contractor to an increased level of risk. In particular, we were concerned with unapproved and poorly documented contractual changes and the lack of ministry oversight regarding contract payments, contract performance and related party transactions. However, under the terms of the existing contract, the contractor does provide regular reporting on key indicators, expenses and financial forecasts, which is reviewed by ministry staff.

Effective contract management practices would minimize the risk of poor performance and ensure that the interests and reputation of the Province, the ministry, the contractor and the program are protected.

The ministry can improve contract management practices by:

- ♦ approving all contract and sub-contract arrangements;
- ♦ monitoring contract performance and keeping records;
- ♦ reviewing management fees and operating expenses that are paid under the contract and sub-contract supporting the FMEP to ensure that value-for-money is achieved and demonstrated; and
- ♦ ensuring that key decisions and discussions impacting the complex contracting arrangements for the FMEP are adequately documented.

LOOKING AHEAD

In June 2011, we communicated our findings and observations to the Deputy Attorney General in a management letter. We informed him of our plan to report the findings of the first phase of this audit to the Legislative Assembly as part of this summary report. We will conduct the second phase of the audit once the ministry has had time to respond to our findings and observations.

RESPONSE FROM THE MINISTRY OF ATTORNEY GENERAL

In reviewing the services delivered through the Family Maintenance Enforcement Program we very much appreciate that the OAG found that enrolments in the program were prompt, records were accurate, payments to support recipients were prompt and enforcement actions were appropriate. These represent key successes for British Columbia's Family Maintenance Enforcement Program.

After receiving the OAG's interim findings in 2010 and, more recently, as set out in the OAG's June 2011 management letter, the Ministry of Attorney General has improved contract management practices with respect to four recommendations made by the OAG. These have proved to be useful improvements and we appreciate the OAG's suggestions in this regard.

The broader concerns expressed by the OAG with respect to management of the contractor's performance can only be addressed in a new contract for FMEP services. Negotiations for such a contract are currently underway. Measures to address the OAG's concerns, which are shared by the ministry, have been a key aspect of the current contract negotiations. Those negotiations remain underway at this time.

MAG welcomes the advice of the OAG throughout the review to date and looks forward to the next phase of the audit.

PROJECT TEAM

Norma Glendinning,
Assistant Auditor General

Jacynthe Bouchard,
Manager

Tony Timms,
Director

Beverly Bouma,
Analyst

Sheila Dodds,
Director



BACKGROUND

The provincial and federal governments have supported student loans in one form or another since 1964. Starting in 2000, the Province of British Columbia began making loans directly to eligible students.

At the time we initiated the audit, the loan administration process allowed students to apply for two distinct loans: one provincial and the other federal. The eligibility criteria for both were the same. Other supplemental programs to assist students in financing their post-secondary education include grants, bursaries, scholarships, loan reductions and interest relief.

As of March 31, 2011, \$991 million in British Columbia student loans was outstanding. Of that, an estimated \$250 million (or 25%) had been assessed as uncollectable.

Delivery of the provincial student loan program is a shared responsibility between two ministries. StudentAid BC, a division of the Ministry of Advanced Education, is responsible for assessing student eligibility. Once a loan is granted, the Revenue Solutions Branch at the Ministry of Finance is responsible for managing it.

The Province has outsourced management of individual loans to two private-sector service providers: Davis + Henderson manages all loans in good standing, and HP Advanced Solutions Inc. manages all loans in default.

PURPOSE AND SCOPE

The objective of our audit was to determine whether British Columbia's student loan program was being managed both to ensure that eligible students have equitable and consistent access to funding

and to ensure that the necessary controls were in place to manage the loan portfolio.

We focused on examining whether:

- ♦ eligibility requirements for receiving British Columbia student loans and loan reductions align with the Province's goal of reducing financial barriers;
- ♦ the Province's policies and procedures ensure that student loans are going to those who are eligible;
- ♦ the Province is effectively managing its student loan portfolio.

We gathered evidence by interviewing program staff, inspecting documents, and testing a sample of loans and loan reductions for eligibility.

OVERALL OBSERVATIONS

During the course of our audit, we learned that the Province and federal government were discussing a number of changes to the student loan program, including administratively integrating the two loans. We therefore decided it was best not to compile and issue a public report as planned, given that our findings and recommendations would have little relevance if the two programs were going to be integrated in the future.

Instead, we summarized the findings from our work and provided them to management in both ministries to consider. These included observations on performance reporting, the scope of the internal audit process, the management of default rates at both the program and institution level, and the effectiveness of collection rates on loans in default.

MANAGEMENT OF STUDENT LOANS

One of our criteria was to assess whether controls over eligibility for student loans and grant reductions were adequate. The results of our eligibility testing were used to support the Auditor General's audit opinion for the Summary Financial Statements 2009/10.

LOOKING AHEAD

An agreement on administrative integration between the provincial and federal student loan programs was completed in December 2010 and came into effect in August 2011. The agreement includes the development of an accountability framework that will report on a broad range of program indicators, including measures of program outcomes.

In conjunction with our audit of the annual Summary Financial Statements, we will continue to monitor the management of student loans, the implementation of planned changes as they occur, and management's actions in response to our observations.

RESPONSE FROM GOVERNMENT

As the Province of British Columbia and the federal government move toward administrative integration of the Canada Student Loan and British Columbia Student Loan programs, the Ministries of Advanced Education and Finance will carefully assess the B.C. Auditor General's observations to ensure that students have equitable and consistent access to student loan funding and that appropriate controls are in place to manage the British Columbia student loan portfolio. The Ministry of Advanced Education continues to expand and strengthen education quality for all institutions in the province. Quality improvements encompass undertakings that are already underway as part of the federal-provincial designation policy framework that focuses on the continued improvement of institutional default rates and improvements to the designation process. The Ministry of Advanced Education is improving its internal audit processes to reduce financial risks to government and will continue to explore opportunities to include equity of access performance measures into future ministry service plans. The Ministries of Advanced Education and Finance will participate with the federal government and the other provinces in cross jurisdictional research and analysis to develop a method of comparing default and recovery rates across jurisdictions. The Ministry of Finance is working with HP Advanced Solutions, Inc., to develop both short and long term strategies to improve collection of defaulted British Columbia student loans.

PROJECT TEAM

Bill Gilhooly,
Assistant Auditor General

Bob Faulkner,
Director

Ken Godwin,
Manager

Brian Urquhart,
Assistant Manager

Stefanie Singer,
Senior Associate



BACKGROUND

A focus on results is the cornerstone of performance-based management, a concept formally introduced in the British Columbia public service in 1995.¹ Performance-based management involves: developing and implementing strategies to improve performance; gathering and assessing performance results; coordinating and making adjustments when required; and publicly reporting performance management plans and results yearly.

The British Columbia public post-secondary accountability framework is a structured performance management and reporting program for the province's public post-secondary system. Included in the system are the Ministry of Advanced Education, four research universities, seven teaching-intensive universities, three institutes and 11 community colleges.

Implemented by the ministry in 2003/04, the post-secondary accountability framework was designed to manage for results in five strategic areas:

1. **Capacity** – The public post-secondary system is of sufficient size to meet the needs of the province.
2. **Access** – All citizens have equitable and affordable access to public post-secondary education.
3. **Quality** – The public post-secondary system is of sufficient quality to meet the needs of students, employers and citizens.
4. **Relevance** – The public post-secondary system is relevant and responsive to the needs of the province by providing the appropriate scope and breadth of post-secondary education.

¹ Office of the Auditor General of British Columbia and Deputy Ministers' Council (1995), *Enhancing Accountability for Performance in the British Columbia Public Sector*. Victoria, BC.

5. **Efficiency** – The public post-secondary system is able to deliver education programs to students in a timely and cost-effective manner.

The Ministry of Advanced Education has identified these five strategic objectives as the result areas that matter most in the public post-secondary system.

PURPOSE AND SCOPE

The purpose of our audit was to evaluate the extent to which the public post-secondary accountability framework has been effectively designed and is operating successfully to influence performance and achieve results.

We examined whether the ministry:

- ♦ is focused on managing for results;
- ♦ uses performance information to monitor and make adjustments to ensure results that matter are achieved; and
- ♦ is accountable for results.

We conducted our examination under section 11 (8) of the *Auditor General Act*. Fieldwork was conducted from January to May 2010, updating performance data results in January 2011. The audit was carried out in accordance with the standards for assurance established by the Canadian Institute of Chartered Accountants.

Since we carried out the audit, the Ministry of Advanced Education has undergone significant organizational change and adjustment. We therefore decided that preparing a management letter for the ministry and this summary report for legislators would be of more value than producing a full public report.

OVERALL CONCLUSION

We concluded that the ministry was not using the public post-secondary accountability framework effectively to influence performance and achieve desired results. While supports for the accountability framework are well designed, the lack of a cohesive focus in practice has undermined its effectiveness.

KEY FINDINGS

Managing for results

We found that the ministry is not effectively focused on managing for results. Although the *Accountability Framework Standards Manual* clearly presents the ministry's desired results – such as the five strategic objectives listed above – other strategic governance documents used by the ministry contain multiple expectations that are not clearly linked to the accountability framework and can create confusion.

As well, the ministry's service plan has become increasingly disconnected from the accountability framework. We were told that this may be a result of the numerous reorganizations in recent years in the ministries involved.

Because ministry governance and accountability mechanisms are not clearly linked, what the ministry wants to achieve is unclear. This makes it challenging for the ministry to monitor and hold institutions accountable for results that matter the most.

Performance management

Performance management systems clearly establish performance expectations, monitor progress and include well-structured processes and communications to ensure results are achieved.

The ministry assesses institution accountability reports for completeness, accuracy and achievement of performance results in relation to targets. Post-secondary institutions are required to explain any missed targets. This information is summarized and disseminated to ministry staff.

However, it was not clear to us whether the ministry is effectively coordinating with institutions to improve performance results. If an institution does not achieve desired results, but the ministry takes no action, then the institution is not being held accountable for its

performance. This lack of follow-up also makes it more difficult for the ministry to promote changes to improve results in the future.

Our analysis of performance results also revealed that various institutions have consistently exceeded some targets but not achieved others for a number of years. Targets must be reassessed regularly. Where targets are too high or too low, they must be adjusted to ensure that their relevance and importance remain paramount.

We noted as well that, with the current funding model, there is no mechanism to link funding to achievement of performance targets. Without a link between funding and the requirement to meet performance targets, there are no consequences when targets are not met.

Performance reporting

Although institutional accountability plan reports are posted on the ministry's website, and institutions report out individually on their results, the ministry does not produce a cumulative report of all post-secondary school achievements in relation to their desired results in the accountability framework.

Effective public reporting is the foundation of good governance. Without clear and comprehensive public reporting, the ministry is not providing full assurance to legislators and the public that the ministry is managing effectively for results.

RECOMMENDATIONS

We recommended that the Ministry of Advanced Education:

1. Provide a clear line of sight and linkage of its strategic communications to institutions, including the accountability framework, to clearly communicate performance expectations for results to be achieved.
2. Strengthen its current performance management processes and require that contingency plans be put into place for institutions where performance expectations are not being met. These plans should provide institutions with targets and time lines for addressing performance issues.
3. Review its targets for institutions on a regular basis to ensure they are both challenging and achievable. Targets where institutions are consistently falling short, or have consistently exceeded them, should be reviewed as a matter of priority.

4. Find another mechanism to link funding to meeting performance targets, so that there are consequences if performance targets are not met.
5. Provide clear and comprehensive performance reporting in relation to the post-secondary accountability framework.

LOOKING AHEAD

We will continue to follow up on our recommendations and request that the ministry provide us with an update on the progress it has made in addressing the concerns we outlined in our management letter.

RESPONSE FROM THE MINISTRY OF ADVANCED EDUCATION

The Auditor General's recommendations provide the Ministry with an opportunity to examine areas for improvement that will benefit all post-secondary education stakeholders within the province, and we thank the Office of the Auditor General for taking the time to understand the complexities of British Columbia's public post-secondary education system. We recognize that additional actions can be taken to ensure that the quality of the post-secondary system remains of high calibre, and we view the recommendations of the audit as an opportunity to build on strengths and extend our achievements to date. Since the field work for this review in 2010, the targets and methodology for three measures have been revised. The Ministry is developing a comprehensive summary report that will address the recommendation of clear and comprehensive performance reporting.

While the Auditor General's report focused on processes rather than outcomes, it is important to highlight the quality of public post-secondary education in British Columbia. By way of accountability, the Ministry and the public post-secondary institutions annually collect feedback from every graduate who can be reached. Results from these surveys show us that 94 percent of respondents were either satisfied or very satisfied with the education they received. Former students also report high levels of satisfaction with the quality of instruction they received, with the relevance of the skills and knowledge they gained, and consistently demonstrate the positive impact of their education on their labour market outcomes. Furthermore British Columbia's public universities enjoy high rankings on both national and international review processes.

PROJECT TEAM

Malcolm Gaston,
Assistant Auditor General

Jim Neily,
Director

Tara Anderson,
Director

Jacqueline McDonald,
Manager

Melissa Kortum,
Assistant Manager

Jessie Carson,
Performance Auditor



BACKGROUND

British Columbia promotes an inclusive education system in which students with special needs are fully participating members in the community of learners. Inclusion means that all students are entitled to equitable access to learning, achievement and the pursuit of excellence in all aspects of their educational programs. As defined by the Province, the practice of inclusion is not necessarily synonymous with full integration in regular classrooms. Inclusion goes beyond placement to include meaningful participation and the promotion of interaction with others.

Responsibility for providing appropriate educational services and supports for students is shared between the Ministry of Education, boards of education (referred to as school boards or school districts) and individual schools. The public education system operates under the authority of the *School Act* and the *Teaching Profession Act*. Special education programs are further guided by Ministerial Orders. These require boards of education to consult with parents, provide integrated educational programs for students with special needs, and provide each special needs student with an individual education plan.

Ministry responsibilities

The purpose of special education services is to enable the equitable participation of students with special needs in British Columbia's educational system. To achieve this purpose, the ministry is responsible for:

- ♦ setting educational standards based on the outcomes students need to achieve;
- ♦ monitoring student performance and reporting the results to the public;

- ♦ working with partner groups to improve student and school performance;
- ♦ allocating funds for the education system; and
- ♦ overseeing the governance of the system as a whole.

Board of education responsibilities

Boards of education are responsible for ensuring that special education services and programs are delivered to students who require them. This includes structuring special education programs and services in a manner that best meets the needs of their students.

The student population and the staffing available to support those students are unique to each school district. For this reason, decisions differ from district to district about assignment of roles and responsibilities for special education, the type of programs and services delivered, and the resource allocation models used.

Number of students with special needs in the province

Approximately 60,000 students in British Columbia's public education system are identified as having special needs – 10% of the total student population. Students with special needs are classified into 12 categories based on formal assessments.

The Ministry of Education's policy on special education defines a student with special education needs as one who has:

- ♦ a disability of an intellectual, physical, sensory, emotional or behavioural nature;
- ♦ a learning disability; or
- ♦ a special gift or talent.

The categories are further classified as either “low incidence” or “high incidence” in reference to the relative proportion of students in each category, but the distinction is also based on the level of resources normally required to address the students’ needs. Low incidence categories generally represent more “visible” disabilities and require greater resources than the high incidence categories.

Spending on special education programs and services

The total budgeted spending on special education programs and services across all school districts for 2009/10 was almost \$700 million. This investment is funded by the Ministry of Education through two types of grants:

- ◆ supplemental grants for special needs account for approximately 45% of special education budgets; and
- ◆ operating grants account for approximately 55% of special education budgets.

PURPOSE AND SCOPE

In late 2009 we began an audit of school district accountability for the effectiveness of special education services. We examined practices in three school districts. The work was conducted in the first half of 2010 and included a survey of school district staff (which we administered in February 2010). Our main focus was on examining whether the three school districts selected were:

- ◆ adequately planning for services to be provided to students who have been identified with special needs, and allocating resources to schools based on those students’ needs; and
- ◆ monitoring and reporting on the delivery, quality and outcomes of services provided.

While conducting our work, we determined that, rather than solely examining processes to ensure accountability for service effectiveness, the audit would provide more value if it focussed on the actual effectiveness of special education services. We therefore consider the work completed to date to be phase one of the audit: it will inform our planning for the second phase.

OVERALL OBSERVATIONS

We observed a high level of commitment and effort given to special education by all three school districts, as well as strong collaboration among district-based staff. The districts were clearly committed to providing the best-quality education for students with special needs, and were working constantly to improve services and be accountable for their efforts. During our site visits, we saw a wide variety of innovative practices designed to improve the quality and delivery of special education programs.

We also observed several challenges to the ability of school districts to be accountable for the effectiveness of special education programs, as well as several opportunities for improvement. We discussed our observations with staff at the three school districts in the fall of 2010, and provided a written summary in the fall of 2011.

KEY FINDINGS

Planning and resourcing services for students with special needs

Although each district has taken its own approach to planning and resourcing services for students with special needs, we found similarities among districts. All models involve both district-based and school-based staff in planning and resourcing decisions, and staff roles and responsibilities are clearly defined and understood. All districts promote the use of good practice and evidence-based resources, and services are based primarily on school-based staff’s understanding of diverse student needs.

One significant challenge is that none of the districts has a process or the information to aggregate, analyze and understand, at a district level, gaps between the existing needs of students and the services that can be provided with available resources. Currently, the best information on student needs is in individual education plans, yet no district has an information system that can aggregate information on student needs. All three districts were at various stages of considering or implementing the BCeSIS special education module, but did express concerns with the system’s limitations, as well as the cost of implementation.

We found that all three school districts allocate resources to their schools using a formula to determine an initial allocation, but make adjustments based on school information on student needs. The process for allocating resources among schools was not documented in any of the districts we visited, and many school administrators and

special education teachers commented that the transparency of the process could be improved.

Most annual planning for special education services occurs at a school level. The role of district-based staff in school-based planning varies across the districts and is often focused on planning for students with low incidence special needs. Long-range planning is achieved primarily through district achievement contracts, but they do not contain any measures or targets specific to special education. Only one of the three school districts has developed a strategic plan specific to special education services. In our view, special education strategic plans would provide districts with a mechanism to develop and document longer-term targets and strategies for special education services and staffing.

Many interviewees and survey respondents felt that processes for planning and resourcing services for students with special needs could be improved with additional guidance from the Ministry of Education on how to prioritize needs, determine appropriate funding for services and students, and document allocation decisions. In addition, district staff said that special education programs would benefit from training for special education staff (developed and delivered by the ministry) and guidance to support greater sharing of practices among districts.

Monitoring and reporting on the delivery, quality and outcomes of special needs services

In all three school districts, regular monitoring of the delivery of special education services occurs at a school level. However, in the absence of a clear, documented definition of service quality for special education services, there is no systematic, documented process for evaluating the quality of services provided: monitoring of service quality is informal. Monitoring of aggregate outcomes is based primarily on Ministry of Education data whereas monitoring of individual student outcomes is done by school-based and district-based staff through individual education plans. All three districts struggle with the challenge of developing both an information system to capture performance data and a formal process with which to analyze the results and use them to inform future planning and continuous improvement.

All three districts identified inadequate information systems as a key barrier to collecting and analyzing data to monitor service delivery, quality and outcomes for students with special needs. Two of the three districts are in the process of implementing a module for the BCeSIS information system, which will enable them to collect data

on individual education plans that could be used for monitoring service delivery, quality and outcomes. However, we heard concerns about whether the system will be able to fully address these monitoring needs.

District-based staff expressed interest in receiving additional guidance in this area from the ministry, including: a definition of service quality for special education; direction on performance indicators and performance standards that school districts can use to monitor trends in student achievement; and expansion of the school district review process to build in a module for reviewing special education initiatives. Interest in the ministry providing additional guidance on promising practices from other jurisdictions was also expressed.

All districts regularly provide basic information on special education services to their boards of education. However, as a result of the inadequacy of information systems and gaps in monitoring data, boards of education do not receive comprehensive information to support their decision-making role. Trustees rely on personal communication for the majority of their information needs on special education. They were generally satisfied with the timeliness and content of the information they receive.

Continuous improvement processes in the districts would benefit from more coordination. The development of goals and targets for special education in school district achievement contracts (not currently included in the contracts of any of the three districts we examined) and special education strategic plans (yet to be developed by two of the three districts) would also help to guide the continuous improvement processes. We found, nonetheless, that all three districts are committed to continuously improving special education services, and all three have implemented changes to improve the quality of special education services.

LOOKING AHEAD

We reported our findings to all three school districts and provided an overall summary of the findings to each school district and the Ministry of Education. All three school districts have already made changes to some of their practices as a result of our examination process, and have identified other areas for improvement.

Provincial data suggest that students with special needs have significantly worse educational outcomes than students without special needs. There is no indication that the gap is narrowing. Our Office will continue to monitor the issue, and will conduct the second phase of the audit once the districts and the Ministry of Education have had time to respond to our findings.

RESPONSE FROM THE MINISTRY OF EDUCATION

The Ministry of Education recognizes that the planning and implementation of quality special education services and supports is a complex endeavour. The Ministry is committed to providing clear policy and guidance regarding evidence-based practices, as well as effective tools to improve supports for all students, including students with special needs.

During the 2009-2010 period in which the Auditor General's work was conducted, the Ministry has been engaged in a number of priority projects that will address district-identified challenges. These projects include improving the usability of data at the school and district level; working with the BC Council of Administrators of Special Education (BC CASE) and the Deans of Education to enhance professional development opportunities for teachers and related professionals; developing a tool to assist districts in conducting quality reviews of their student service provision and student learning outcomes; and continuing to work with BC CASE to develop effective mechanisms for sharing best practices among districts.

As well, government recently announced its intention to commit \$165 million, over the next three years, in support of special needs children and class organization. The administration of this class organization fund is presently being discussed with the BCTF.

British Columbia's school system, with leadership of the Ministry, is currently engaged in a system-wide renewal process, modernizing the way students are educated so they are prepared for the world, not

only as it is now, but will be in the future. This renewal process will certainly involve a concerted effort to improve supports and services for all students, including students with special needs.

PROJECT TEAM

Norma Glendinning,
Assistant Auditor General

Reed Early,
Manager

Kathy Crawley,
Director

Jessica Schafer,
Performance Auditor

Sheila Dodds,
Director

Pamela Humphries,
CCAF Fellow

Lori Berndt,
Manager



BACKGROUND

It is hard to imagine the world now without wireless technologies. In less than two decades, the use of wireless devices has gone from being a fad to a cornerstone of operation in many aspects of our lives, from health care and education to business and entertainment. Like many British Columbians, the provincial government has embraced wireless technologies to deliver services, provide access to information and improve communication and collaboration.

Risks with the benefits

However, with the benefits of wireless technologies have come risks. When a wireless connection is used to transmit information, security precautions are essential to protect that information. Since wireless devices transmit signals freely through the air, anyone with the correct equipment and know-how could intercept transmissions and capture the information if appropriate security measures are not in place.

In addition to this risk of passive interception is the risk of hackers penetrating right to the heart of systems if the wireless network is not secured properly. As technology improves to better encrypt and protect information transmitted wirelessly, so do the tools available to break into it. Organizations must therefore remain vigilant in their management of wireless networking security, and adopt a full suite of tools and practices to protect against interception and attacks.

Ongoing audits of wireless security

Wireless networking security is an ongoing topic in our annual work plan. We examine the issue when we conduct our annual financial statement audits on government organizations. In the two reports

we have published in the last three years on how well government is managing its risks related to wireless networking security,² we discussed in detail the nature of wireless computing and some of the most common risks to which government is susceptible.

PURPOSE AND SCOPE

The purpose of this, our third audit on the topic of wireless networking security, was to assess whether two government organizations – the University of British Columbia and Camosun College – are adequately protecting the confidentiality, integrity and availability of information exchanged in their wireless local area networks (WLANs). It is essential that they:

- ◆ have implemented adequate policies, standards and procedures for managing their wireless networks;
- ◆ are securing their wireless networks through the proper configuration of wireless devices and implementation of control procedures; and
- ◆ are adequately monitoring wireless activities.

Our assessment criteria were based on the best practice guide *Establishing Wireless Robust Security Networks: A Guide to IEEE802.11i*, published by the National Institute of Standards and Technology. We also used references from publications of the Information Systems Audit and Control Association (ISACA), and the SANS Institute (an organization devoted to computer security) in developing our audit program and criteria.

The University of British Columbia, with extensive campuses in Vancouver and the Okanagan, has an estimated 50,000 students and employs approximately 19,500 faculty and staff on those two

² *Wireless Networking Security in Victoria Government Offices: Gaps in the Defensive Line (Phase 1)*; *Wireless Networking Security in Government: Phase 2*.

campuses. It is a complex organization with significant deployment of wireless accessibility throughout its campuses and facilities. Camosun College, with two campuses located in the Victoria area, has an estimated 12,500 students and employs approximately 1,000 faculty and staff. (We were also the auditor of record for the college for 2010/11. Examining its wireless networking security has increased our understanding of the organization and its security risks – factors that we will consider in our financial statement audit of the entity.)

We carried out our audit fieldwork in August and September 2010. During that time, we collected more than 13,000 wireless signals from the sites we visited.

OUR APPROACH

We conducted the audit in accordance with the assurance standards recommended by the Canadian Institute of Chartered Accountants. For this work, we used traditional audit techniques such as reviewing documents and conducting interviews to assess IT management areas. We also walked inside and outside campus buildings with specialized equipment and software to detect “rogue” or unauthorized wireless access devices and the level of security setting of installed wireless access devices.

In April 2011, we completed clearing our findings and recommendations in detailed management reports with each of the two organizations. Both organizations agreed with our recommendations and are acting on them.

What we did not look at:

- ◆ We assessed the adequacy of security in wireless connection when users are logged on to a network through wireless access points. We did not look at network security processes behind the wireless access points or at the network design for those organizations.
- ◆ The devices used to log on to wireless networks are mostly laptop computers. We did not examine the configuration of users’ computing devices.
- ◆ We did not review hand-held devices such as BlackBerries and cell phones because they involve a different wireless technology than the Wi-Fi technology used with laptops.

OVERALL CONCLUSIONS

University of British Columbia

We concluded that the University of British Columbia has substantially met the best practice criteria against which we assessed the organization’s wireless networking security performance. However, management of wireless networking security still needs improvement in areas such as: policy and standard-setting for wireless networking and infrastructure; and monitoring of wireless networking activities.

Camosun College

We concluded that Camosun College has partially met the best practice criteria against which we assessed the organization’s wireless networking security performance. The organization’s wireless networking is secure in protecting data during transmission when secured connectivity practices are used. However, management of wireless networking security needs improvement in areas such as: policy and standard-setting for wireless networking; strengthening of password security management; enhancement of the roles and responsibilities of key IT personnel; and monitoring of wireless networking activities.

SUMMARY OF FINDINGS

The table below provides a summary of our findings about the extent of wireless security in the two entities, by objective and criteria we assessed.

Objective/Criteria	University of British Columbia	Camosun College
1. Maintain effective management of wireless security		
a. Establish and maintain adequate policies, procedures, guidelines and standards for wireless local area networks (WLANs)		
b. Assign responsibility for wireless security		
c. Maintain documentation of wireless infrastructure		
d. Formally approve wireless technology deployment		
e. Maintain a current list of wireless approval		
f. Use secure methods to administer wireless devices		
2. Secure wireless infrastructure		
a. Securely configure wireless devices		
b. Deploy updates and security patches		
c. Encrypt wireless traffic		
d. Implement additional controls to secure networks accessible by wireless devices		
e. Implement physical security controls to limit unauthorized wireless activity		
3. Monitor wireless security		
a. Maintain an inventory of wireless devices on the network		
b. Monitor wireless activity logs		
c. Monitor for unauthorized wireless activities		

- Legend:
- Not achieved
 - Partially achieved
 - Substantially achieved

RECOMMENDATIONS

The table below summarizes the recommendations we made for each key area we audited, by entity (University of British Columbia and Camosun College).

Objective/Criteria	University of British Columbia	Camosun College
1. Maintain effective management of wireless security		
<p>Establish and maintain adequate policies, procedures, guidelines and standards for wireless local area networks (WLANs)</p>	<p>We recommended that the university expand its WLAN policies to cover the minimum areas listed in best practice guides, in order to ensure the enforcement of undisputed direction for WLAN security and infrastructure.</p> <p>We recommended that the university require that the Information Network Security Policy be supported by detailed formal documentation of standards on wireless security networking and by specific procedures and guidelines to manage wireless networking resources.</p> <p>We recommended that the university have senior IT management periodically review, update and approve key policies and guidelines.</p>	<p>We recommended that the college finalize and formally adopt the Information and Network Security Policy, and support the policy with detailed standards on wireless networking security and specific procedures or guidelines to manage wireless networking resources.</p> <p>We recommended that the college: update its communication of IT security policies, guidelines, procedures and standards to wireless device users; work to make people aware of the risks of using unsecured wireless networking; and communicate this message more visibly (e.g. by posting notices in Wi-Fi areas, by running a warning page on the log-on screen).</p>
<p>Assign responsibility for wireless security</p>	<p>We recommended that the university require that all job description documents for key IT personnel show evidence of having been formally approved, and when, by Human Resources and senior IT personnel.</p>	<p>We recommended that the college: formalize the IT security function by detailing the responsibilities in the Senior Network and Security Administrator job description; and ensure that senior IT management provides strong oversight and monitoring of the IT security function.</p> <p>We recommended that the college periodically update the job descriptions for key IT positions to ensure proper accountability for the associated roles and responsibilities.</p> <p>We recommended that the college establish a formal training program for key IT staff to ensure that their knowledge in IT is kept up-to-date and they are able to properly maintain and install the network.</p>
<p>Maintain documentation of wireless architecture</p>		<p>We recommended that the college formally document its network infrastructure, with details showing how the network is integrated with the wired and wireless networks; and have its senior IT management formally approve the network infrastructure diagram and update it periodically.</p>

WIRELESS NETWORKING SECURITY: PHASE 3

Objective/Criteria	University of British Columbia	Camosun College
2. Secure wireless infrastructure		
Securely configure wireless devices		We recommended that the college change certain wireless connecting practices to higher level security settings.
Encrypt wireless traffic		We recommended that the college require all its staff who have higher level access rights to systems, applications and data to use only secured wireless methods, such as Eduroam.
Implement additional controls to secure networks accessible by wireless devices		<p>We recommended that the college follow best practice to properly segment its IT network in order to mitigate the risk of the whole network being exposed should security be compromised.</p> <p>We recommended that the college follow recognized best practices relating to password security, requiring the:</p> <ul style="list-style-type: none"> • regular changing of passwords; • creation of effective passwords; and • enforced change of passwords for key personnel.
3. Monitor wireless security		
Monitor wireless activity logs	We recommended that the university implement secure back-up procedures for activity logs in case the original logs are accidentally or intentionally deleted or altered.	<p>We recommended that the college implement secure back-up procedures for activity logs in case the original logs are accidentally or intentionally deleted or altered.</p> <p>We recommended that the college establish formal policies and procedures for monitoring network activities. The policies should cover, at a minimum: types of monitoring; frequency of monitoring; designated authorized individuals; documentation requirements; retention of logs; and reporting.</p>
Monitor for unauthorized wireless activities	<p>We recommended that the university perform regular scanning to validate the functionality of the wireless controller to ensure it is functioning in accordance to expected functionality.</p> <p>We recommended that the university ask the vendor to provide a list of criteria for use in determining whether the monitoring devices are programmed adequately with sufficient logic to detect malicious activities.</p>	<p>We recommended that the college perform regular scanning to validate the functionality of the wireless controller to ensure it is functioning in accordance to expected functionality.</p> <p>We recommended that the college formulate action plans to deal with: unauthorized access devices; security/privacy breaches; and intrusive or malicious activities against the college network either through wired or wireless network.</p> <p>We recommended that the college ask the vendor to provide a list of criteria for use in determining whether the monitoring devices are programmed adequately with sufficient logic to detect malicious activities.</p>

LOOKING AHEAD

In the coming year, we will follow up with the University of British Columbia and Camosun College to assess their progress in addressing our audit recommendations. We will also complete the follow-up work from our previous two audits of wireless networking security.

As well, we will continue to select a small number of organizations each year to audit for wireless security practices, until we see significant improvements in this area across the broader public sector.

RESPONSE FROM THE UNIVERSITY OF BRITISH COLUMBIA

The University of British Columbia operates one of the largest enterprise class academic wireless local area networks (WLAN) in Canada. UBC's WLAN is highly complex and uses state-of-the-art technologies and standards to securely deliver edge connectivity services to the UBC community. This service is considered to be critically important in achieving the University's teaching, learning and research goals.

The Office of the Auditor General audited this complex enterprise class network; while the task was significant we were very pleased to have an independent audit to evaluate the strengths and weaknesses of UBC's WLAN. We agree with the findings of the Office of the Auditor General. The findings are scheduled to be addressed through a series of technology roadmaps and transformation initiatives.

RESPONSE FROM CAMOSUN COLLEGE

Camosun College appreciates the Auditor General's audit of wireless network security at our Lansdowne and Interurban campuses. Security and integrity of wired and wireless network infrastructure is critical to the trust and success of our students, faculty and staff, as well as the general public.

The audit has provided valuable recommendations that will allow Camosun College to further strengthen our policies, standards, and awareness opportunities. These recommendations have been shared with the IT Council and the college executive, and management of IT

Services have been charged with taking appropriate actions to respond to the report recommendations.

Thank you for the time and effort involved in providing the audit. The recommendations will assist in our continued improvement of wireless network security at the college.

PROJECT TEAM

Bill Gilhooly,
Assistant Auditor General

David K. Lau,
Director, IT Audit

Raveendran Madappattu,
Manager, IT Audit