AUDITOR GENERAL
Alberta

Report of the Auditor General of Alberta

October 2012

AUDITOR GENERAL *Alberta*

Mr. David H. Xiao
Chair
Standing Committee on Legislative Offices

I am honoured to send my *Report of the Auditor General of Alberta—October 2012* to Members of the Legislative Assembly, as required by section 19(5) of the *Auditor General Act.*

[Original signed by Merwan N. Saher]

Merwan N. Saher, FCA
Auditor General

Edmonton, Alberta
October 24, 2012

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Auditor General's Message

The Office of the Auditor General serves the Legislative Assembly and the people of Alberta. Our mandate is to examine and report publicly on government's management of, and accountability practices for, the public resources entrusted to it. Under the *Auditor General Act,* the Auditor General is the auditor of all government ministries, departments, funds and provincial agencies.

We focus our priorities and resources in areas that will result in improved:

- governance and ethical behaviour—these underpin the success of any organization
- safety and welfare of all Albertans—especially the most vulnerable in our society
- security and use of the province's resources—which belong to all Albertans and must be protected for future generations

In this report, through our stand-alone systems audits, we call attention to some critical program areas of government and matters that impact Albertans—bridge safety, climate change and the protection of information assets. Through our financial statements audits, we report on identified weaknesses in financial controls and processes within the 175 government departments, boards, agencies, commissions and related organizations that we audit each year. For example, the weaknesses described in this report may result in inaccurate public reporting about oil and gas revenues, inefficiencies in Alberta's post-secondary institutions and the risk of incurring unnecessary expenses.

There are a total of 33 recommendations to government in this report, three of which are repeated. We find it necessary to repeat these recommendations because we believe these departments have not done enough to demonstrate they have implemented our previous recommendations.

Of particular note in this report:

Transportation—Managing Structural Safety of Bridges (pages 21–31)
Our audit did not find evidence that Alberta's bridges were unsafe but did highlight the risks to public safety and the protection of the investment in these assets. There are currently 4,400 bridge structures in Alberta, with an estimated replacement value of $6.7 billion. Albertans rely on these structures to be well-maintained—to be safe and allow for the movement of vehicles and goods. We examined the systems in place within Alberta Transportation to manage the structural safety of this valuable infrastructure. We found several deficiencies in terms of the quality, timeliness and completeness of inspections, the lack of adequate certification of inspectors, the contracting process used for inspections, the ability to monitor maintenance activities, and the access to information required by decision makers to assess the Department's capital needs.

Environment and Sustainable Resource Development—Climate Change, First Follow-up (page 38)
Climate change has far-reaching impacts on Alberta's economy, natural environment and the health of Albertans. This follow-up audit focused on four of the ten recommendations we made in 2008 and 2009. What we found was while the Department of Environment and Sustainable Resource Development had made satisfactory progress or had implemented most of our previous recommendations, we had to repeat one recommendation regarding public reporting. We believe the Department has not improved the reliability, comparability and relevance of its public reporting on results and the costs incurred in meeting Alberta's

climate change targets. Without clear and accurate public reporting, Albertans cannot assess whether the government has made progress on achieving the targets it has set or if the monies being spent to achieve these goals are a wise investment that is yielding results.

Executive Council—Protecting Information Assets (page 62)
The protection of information, particularly personal information, is of great concern. Albertans need to be able to access information online when they need it and feel confident in the fact that their personal information is protected from unauthorized use. The government creates, uses and manages large volumes of sensitive and confidential information. Our audit found that IT governance could be improved and made more consistent across government. We have recommended that Executive Council with its cross-government focus conduct a risk assessment to determine what needs to be done to mitigate the possibility of misappropriation of personal and government information. Further, a clear governance model is needed to determine who is responsible and accountable for this information across the whole of government to ensure assets are adequately protected.

ATB Financial (page 148)—We find it necessary to repeat a recommendation we made in our *November 2011 Report* regarding ATB Financial's new banking system. We are concerned the institution has not done enough to ensure the key controls in its new banking system are implemented and operating effectively. Without this, management and the Audit Committee could be making decisions based on information that is not reliable.

Department of Energy (page 95)—We found that effective controls were lacking in the reporting of royalty information disclosed in financial statements which could lead to readers of this information being misinformed about the amounts involved in royalty reduction programs.

Department of Transportation (page 142)—We found that by delaying the implementation of a policy governing the use of personal vehicles by senior management, the Department missed an opportunity to realize significant savings.

Recommendation Highlights

This report contains 30 new recommendations and three repeated recommendations, all listed starting at page 9. The repeated recommendation was made because in our judgement, taking into account the complexity of the matter and the action planned by management, progress was insufficient.

As part of the audit process, we provide recommendations to government in documents called management letters. We use public reporting to bring recommendations to the attention of Members of the Legislative Assembly. For example, members of the all-party Standing Committee on Public Accounts refer to the recommendations in our public reports during their meetings with representatives of government departments and agencies.

We believe all of the recommendations in this report require a formal public response from the government. In instances where a recommendation has been made to a board-governed organization, we expect the organization to implement the recommendation and report back to its respective government ministry as part of proper oversight of the organization. By implementing our recommendations, the government will significantly improve the safety and welfare of Albertans, the security and use of the province's resources, and the governance and ethics with which government operations are managed.

Government restructuring on May 8, 2012, resulted in changed responsibilities and the consolidation of some ministries. We report on the government ministries as they were before the restructuring. However, we have made our recommendations to the ministries that will report on their progress to the all-party Standing Committee on Public Accounts.

Reporting the status of recommendations

We follow up all recommendations and report their status in our public reports. The timing of our follow-up audits depends on the nature of our recommendations. To encourage timely implementation, and assist with the timing of our follow-up audits, we require a reasonable implementation timeline on all recommendations accepted by the government or the entities we audit that report to the government. We recognize some recommendations will take longer to fully implement than others, but we encourage full implementation within three years. Typically, we do not report on the progress of an outstanding recommendation until management has had sufficient time to implement the recommendation and we have completed our follow-up audit work. We repeat a recommendation if we find that the implementation progress has been insufficient.

We report the status of our recommendations as:
- **Implemented**—we explain how the government implemented the recommendation.
- **Satisfactory progress**—we may state that progress is satisfactory based on the results of a follow-up audit.
- **Progress report**—although the recommendation is not fully implemented, we provide information when we consider it useful for MLAs to understand management's actions.
- **Repeated**—we explain why we are repeating the recommendation and what the government must still do to implement it.
- **Changed circumstances**—if the recommendation is no longer valid, we explain why and remove the recommendation from our outstanding recommendation list.

Progress in dealing with outstanding recommendations

We have a chapter called Outstanding Recommendations—see page 159. It provides a complete list of the recommendations that are not yet implemented. Although management may consider some of these recommendations to have been implemented, we do not remove recommendations from this list until we have completed follow-up audit work to confirm implementation.

The table of outstanding recommendations on page 159 shows that half of the numbered recommendations are more than three years old. The recommendations cover topics such as seniors care, research at the University of Calgary, food safety, infrastructure needs, post-secondary institution non-credit programs, mental health, CEO selection, evaluation and compensation, climate change, and sand and gravel.

In our next business plan, we will indicate our schedule for revisiting the 25 recommendations that are ready for follow-up audits.

We will encourage the Standing Committee on Public Accounts to question deputy ministers on their plans for implementing all outstanding recommendations.

In summary, the Office still views it as a priority to reduce the number of outstanding recommendations. The government has indicated to us that it concurs with this goal.

October 2012 Recommendations

We conducted our audits in accordance with the *Auditor General Act* and Canadian standards for assurance engagements.

Stand-alone Systems Auditing

Department of Transportation

No. 1
Page 21

Department—Design of level 1 visual inspections—Recommendation
We recommend that the Department of Transportation improve its inspection processes by ensuring that it collects all the information it needs to assess the quality of inspections.

Implications and risks if recommendation not implemented
The Department may not have all the information it needs to remedy poor contractor performance. This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

No. 2
Page 23

Department—Quality of inspections—Recommendation
We recommend that the Department of Transportation regularly assess whether contractors perform inspections following its standards and take corrective action if they do not.

Implications and risks if recommendation not implemented
Inspections may not meet the standards in assessing the quality of the bridge elements and may not identify all required maintenance. This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

No. 3
Page 24

Department—Inspector certification—Recommendation
We recommend that the Department of Transportation ensure that contractors who perform inspections are properly certified.

Implications and risks if recommendation not implemented
This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

No. 4
Page 25

Department—Timeliness and completeness of inspections—Recommendation
We recommend that the Department of Transportation ensure that bridges are inspected as frequently as its standards require.

Implications and risks if recommendation not implemented
Without inspecting bridges according to its standards, the Department risks having unsafe bridges open. The Department may not maintain the bridges at the optimal time.

No. 5
Page 26

Department—Assessing whether to contract out program delivery—Recommendation
We recommend that the Department of Transportation regularly assess whether it should contract out inspections or do them itself.

Implications and risks if recommendation not implemented
Without a regular assessment of the costs and benefits of contracting out bridge inspections, the Department may not know if it is getting value for the money it spends on these services.

No. 6
Page 27

Department—Contracting level 1 bridge inspections—Recommendation
We recommend that the Department of Transportation improve its process to contract its level 1 inspections by:
- documenting how it establishes criteria for assessing candidates and awards points for each criterion.
- ensuring proposal requirements do not limit qualified candidates.

Implications and risk if recommendation not implemented
Without a rigorous, fair and transparent contract process, the Department may not be obtaining the best services for the best price.

No. 7
Page 28

Department—Controls over access to the bridge information system—Recommendation
We recommend that the Department of Transportation improve its processes to monitor access to the computer system that manages bridge inventory and inspections.

Implications and risks if recommendation not implemented
The Department risks staff and contractors accidently or intentionally creating errors in the information about bridges. Errors in the load ratings or bridges could reduce driver safety. Contractors could override Department's controls if they approved inspections they did.

No. 8
Page 29

Department—Maintenance activities—Recommendation
We recommend that the Department of Transportation improve the information that senior management receives on inspector activities, results, maintenance and other actions.

Implications and risks if recommendation not implemented
This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

No. 9
Page 31

Department—Capital planning—Recommendation
We recommend that the Department of Transportation ensure that it gives decision makers the information they need to assess the impact of funding alternatives on bridge safety and protection of the province's investment.

Implications and risks if recommendation not implemented
The Department risks not giving decision makers the information they need to assess the Department's capital needs.

Environment and Sustainable Resource Development

No. 10
Page 38

Department—Public reporting—Recommendation repeated
We again recommend that the Department of Environment and Sustainable Resource Development improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.

Implications and risks if not implemented
Without clear public reporting of results in relation to comparable targets and total costs, Albertans cannot assess the government's progress toward Alberta's climate goals or determine whether the overall investment in climate change actions is yielding the expected results.

Executive Council

No. 11
Page 62

Executive Council—Assess risk and improve oversight—Recommendation
We recommend that Executive Council:
- assess the risks to public information assets throughout the government
- determine if the government has adequate IT security policies, standards and controls to mitigate risks
- determine who is responsible and accountable to ensure that public information assets are adequately protected. Specifically:
    - who is responsible for monitoring compliance with IT security requirements
    - who is responsible for ensuring or enforcing compliance with security requirements
    - what actions should be taken when non-compliance is identified
    - how is compliance to security requirements demonstrated

Implications and risks if recommendation not implemented
Without adequate security policies, the ability to monitor and enforce them throughout government, or the need for government entities to demonstrate they adequately protect public information assets, government information and the personal information of Albertans is at risk of unauthorized use or disclosure.

Financial Statement and Performance Measures Auditing

Agriculture and Rural Development

No. 12
Page 85

Department—Enterprise risk management—Recommendation
We recommend that the Department of Agriculture and Rural Development improve its risk management processes.

Implications and risks if recommendation not implemented
Without a formal process to identify and manage risk, the Department may not mitigate all significant risks and may focus resources on less significant issues.

Energy

No. 13
Page 95

Department—Improve controls over royalty adjustments note disclosure--Recommendation
We recommend that the Department of Energy improve its controls over the completeness and accuracy of royalty information disclosed in the financial statements.

Implications and risks if recommendation not implemented
Without effective controls and review of amounts included in the royalty adjustments note disclosure, the amounts could be significantly misstated. This could result in users of the financial statements being misinformed about the amount of royalty reduction programs.

No. 14
Page 96

Department—Ensuring compliance with terms of bioenergy grant agreements—Recommendation
We recommend that the Department of Energy ensure that recipients under the bioenergy producer credit grant program are complying with their grant agreements.

Implications and risks if recommendation not implemented
Without timely receipt and review of the annual reports from bioenergy producers the Department may not be receiving the information it requires to assess compliance with grant agreements and to assess whether the objectives of the bioenergy producer credit program are being met.

No. 15
Page 97

Department—Improve processes over bitumen royalty revenue estimates recognized in the financial statements—Recommendation repeated
We again recommend that the Department of Energy improve its controls to ensure consistent application of methodology used to calculate bitumen royalty estimates.

Implications and risks if recommendation not implemented
Estimates comprise a significant component of royalty revenues; thus, if assumptions and calculation methods are inconsistent the risk of material financial misstatement is increased.

Enterprise and Advanced Education

No. 16
Page 100

Department—Improve financial reporting processes—Recommendation
We recommend that the Department of Enterprise and Advanced Education improve its financial reporting processes by:
- training staff on the policies, processes and controls related to preparing the financial statements
- improving its monitoring and review processes to ensure accuracy of the financial information
- reducing its reliance on manual processes, to increase the efficiency and accuracy of financial reporting

Implications and risks if recommendation not implemented
Without effective controls over its financial reporting processes, the Department cannot be sure, or demonstrate, that its operations are efficient and effective, and cannot promptly and accurately report the financial results that management and boards need for decision making.

No. 17
Page 101

Department—Resolve outstanding sector accounting issues—Recommendation
We recommend that the Department of Enterprise and Advanced Education work with the Office of the Controller and institutions to develop a process for efficient resolution of accounting issues in the post-secondary sector.

Implications and risks if recommendation not implemented
Ineffective processes to resolve accounting and reporting issues across the sector could result in incorrect financial results and inefficiencies from duplicated efforts for reassessments.

Enterprise and Advanced Education—Post-secondary Institutions and Alberta Innovates Corporations

No. 18
Page 107

Athabasca University—Implement enterprise risk management systems—Recommendation
We recommend that Athabasca University implement an effective risk management system.

Implications and risks if recommendation not implemented
Athabasca University may not identify and manage risk efficiently and effectively, and the board and its audit committee might not effectively oversee the University's risk management systems.

No. 19
Page 108

Athabasca University—Improve conflicts of interest procedures—Recommendation
We recommend that Athabasca University update its policy and procedures, and implement a process for staff to annually disclose potential conflicts of interest in writing so the University can manage the conflicts proactively.

Implications and risks if recommendation not implemented
The University may be unable to properly manage the financial, business and legal risks of real or perceived conflicts of interest.

No. 20
Page 110

University of Alberta—Improve controls over bookstore inventory—Recommendation
We recommend that the University of Alberta:
- improve its controls to value the bookstore's inventory
- develop policies and processes to identify obsolete inventory in its bookstores and in storage
- develop processes to regularly review the cost of goods it holds in inventory

Implications and risks if recommendation not implemented
Ineffective processes and controls over inventory could result in undetected fraud and error in the bookstore's operations, as well as missing refunds for returning books to suppliers. Also, inaccurate inventory data and valuations could lead to ineffective oversight and management of the bookstore.

No. 21
Page 112

University of Calgary—Remove users' access privileges promptly—Recommendation
We recommend that the University of Calgary:
- define an acceptable timeframe to disable or remove users from the application and the network
- document, communicate and consistently follow a process to deactivate users from the University's information technology systems within the defined timeframe

Implications and risks if recommendation not implemented
Unauthorized people may gain access to the University's systems or make changes to sensitive information or restricted transactions.

Health

No. 22
Page 119

Alberta Health Services—Data conversion testing—Recommendation
We recommend that Alberta Health Services improve documentation of its conversions from legacy systems to new systems by requiring the project team to clearly document how they ensured:
- converted data is complete and accurate
- the new system functions with the converted data as intended

Implications and risks if recommendation not implemented
If AHS does not thoroughly test its converted data, there is a risk that errors in the converted data may result in errors in employee pay.

No. 23
Page 121

Alberta Health Services—Payroll—Accuracy monitoring activities—Recommendation
We recommend that Alberta Health Services improve its monitoring activities to ensure the accuracy of transactions in its payroll system.

Implications and risks if recommendation not implemented
If AHS does not monitor transactions to ensure the accuracy of its payroll system, it could make inappropriate changes to payroll, resulting in the over-or underpayment of wages and benefits.

No. 24
Page 122

Alberta Health Services—Accounts payable system—Goods received not invoiced listing—Recommendation
We recommend that Alberta Health Services complete its review of old amounts on the Goods Received Not Invoiced report to validate amounts or resolve issues as they arise before each year end.

Implications and risks if recommendation not implemented
If AHS does not review old amounts on the GRNI list, there is a risk that accrued liabilities could be overstated.

No. 25
Page 123

Alberta Health Services—Fees and charges—Recommendation
We recommend that Alberta Health Services:
- reinforce its admissions policies to ensure consistent application
- review its controls over the processes that generates fees and charges revenue, to ensure they are appropriately designed, consistent across regions and aligned with current policies

Implications and risks if recommendation not implemented
If AHS employees do not fully understand admissions information flow, there is a risk of inappropriate billing.

No. 26
Page 124

Alberta Health Services—Journal entry review process—Recommendation
We recommend that Alberta Health Services implement a recurring process to ensure significant and/or unusual journal entries are reviewed and approved appropriately.

Implications and risks if recommendation not implemented
If management does not oversee significant or unusual journal entries, there is a risk that inappropriate or unsupported journal entries could be processed.

Service Alberta

No. 27
Page 133

Service Alberta—Ranking of non-compliance at registry agencies—Recommendation
We recommend that Service Alberta rank the significance of findings it identifies at registry agencies and document its follow-up process.

Implications and risks if recommendation not implemented
Non-compliance with government policies and legislation may exist at registry agencies if Service Alberta does not have an effective documented process to rank the significance of findings it identifies and to focus its follow-up work.

Transportation

No. 28
Page 141

Department—Monitoring access and data entry to the Program Management Application—Recommendation
We recommend that the Department of Transportation improve its processes to monitor access and data entry to the computer application it uses to manage contracted work for maintenance of provincial highways.

Implications and risks if recommendation not implemented
Without a documented process and clear segregation of duties, the Department may make inappropriate payments for the work or at prices that are not in accordance with contracts.

No. 29
Page 142

Department—Vehicle use—Recommendation
We recommend that the Department of Transportation implement a policy about vehicle use, with due regard for economy.

Implications and risks if recommendation not implemented
The Department may incur unnecessary expenses that could have been used in other ways to better serve the Alberta public.

Treasury Board and Finance

No. 30
Page 148

ATB Financial—New banking system internal controls—Recommendation repeated
We again recommend that ATB Financial confirm that the key controls in the new banking system, as identified in the risk and control matrices, are implemented and operate effectively.

Implications and risks if recommendation not implemented
Management and the Audit Committee are relying on key controls that have not yet been confirmed to be implemented and operating effectively.

No. 31
Page 149

ATB Financial—Payment Card Industry—Recommendation
We recommend that ATB Financial put in place processes to monitor its compliance with the Payment Card Industry's requirements.

Implications and risks if recommendation not implemented
If ATB is found to be in non-compliance with PCI's data security standards, it could be assessed financial penalties, lose reputation as a credit card provider, and lose its ability to be a MasterCard issuer and acquirer.

No. 32
Page 151

Alberta Investment Management Corporation—Securities reconciliation—Recommendation
We recommend that Alberta Investment Management Corporation obtain third-party statements for all investments not held by external custodians and reconcile its records to those statements.

Implications and risks if recommendation not implemented
All investments held by AIMCo may not be accurately recorded in its records if they are not regularly reconciled to external custodians and third-party statements.

No. 33
Page 154

Alberta Gaming and Liquor Commission—Improve quality of employee benefits note disclosure in the financial statements—Recommendation
We recommend that management of the Alberta Gaming and Liquor Commission obtain sufficient information to ensure compliance with International Financial Reporting Standards for disclosures in the employee benefit plans note in its annual financial statements.

Implications and risks if recommendation not implemented
Without complete disclosures, users of AGLC's financial statements may not understand the risks and exposures surrounding the multi-employer pension plans.

Stand-alone Systems Auditing

Report of the Auditor General of Alberta—October 2012

Transportation—Managing Structural Safety of Bridges

Summary

What we examined

The Department of Transportation is responsible for building and maintaining bridges on the Province's highways. There are currently 4,400 bridge structures, comprised of 1,600 bridges and 2,800 bridge-sized culverts. The Department estimates the replacement value of these bridge structures to be $6.7 billion.

Our objective was to assess if the Department of Transportation has effective systems to manage the structural safety of bridges. To do that, we examined if the Department has adequate processes to:

- assess the condition and safety of bridges and identify work that should be done
- maintain the bridges to keep them safe and protect Albertans' investment
- determine future needs for bridge rehabilitation and replacement

The Department conducts two types of inspections:

- Level 1 inspections, which are visual assessments of the bridge's condition, using basic tools and equipment
- Level 2 inspections, which are in-depth inspections using specialized equipment

Conclusion

We concluded that the Department generally has well-designed systems to manage the structural safety of bridges. However, we had several significant findings where those systems were not operating as they should. We also found that the Department did not adequately track or report the actions taken in response to bridge inspections. Consequently, the risk of the Department not maintaining bridges to ensure structural safety and not protecting Albertans investment is unnecessarily high. We did not find evidence of unsafe bridges.

Notwithstanding the significance of our findings, the Department believes that it should be able to deal with the deficiencies relatively quickly.

Why it is important to Albertans

Well-maintained bridges are necessary to ensure the safety of Albertans and protect their investment. Many of Alberta's major industries rely on the highway system to move goods.

What we found

Inspections, standards and training—the Department visually inspects bridges to identify safety issues and maintenance needs. It has developed comprehensive standards and guidance documents for inspections, and it trains and certifies inspectors to perform inspections based on the standards. Its inspection forms capture the information the Department requires to identify immediate maintenance needs and assess changes in structures that need more investigation. The Department also has standards for in-depth inspections and these are similarly well structured and documented.

Actual inspection practices—the Department does not regularly monitor access to the computer system it uses to manage the bridge inventory and inspections. It also does not regularly monitor whether inspectors have valid certification. Not all bridges were visually inspected as frequently as the Department's standards require.

Monitoring of inspections and contractor performance—the Department has designed good monitoring processes, but has not consistently followed them. Spot audits did not occur for two of the prior four years, despite being a requirement of the Department's process. It also lacks good processes to remedy poor performance by contracted inspectors.

Monitoring of remedial action—the Department's information systems capture inspection results but do not track findings to resolution. Its processes to accumulate inspection findings and monitor that the right remedial action is taken are inadequate. The Department has assigned responsibility for bridges in each of four regions to the regions' bridge managers. They track maintenance work with spreadsheets. The regions do not track priority recommendations through to their resolution, such as requesting a level 2 inspection, increasing monitoring or repairing the bridge.

The Department's timelines for resolving deficiencies that level 1 inspections ranked as high priority were followed for deficiencies rated 1 out of 9. For deficiencies rated 2, regional bridge safety staff did their own assessment, but did not track whether they concluded that maintenance was required, or whether it was done. Senior management does not require its regional offices to report their maintenance activities, so does not have assurance that appropriate action was taken.

Capital planning—the Department's systems to use inspection results to determine the optimal time to rehabilitate or replace bridges are well designed and work as designed. The Department's 2012–2017 capital plan submission says it needs about $900 million over the next 10 years to replace bridges. The Department can show that the age and condition of bridges means that current funding—of about $25 million annually—will be inadequate. The Department communicated its strategy to manage the shortfall; it will reduce the posted maximum weight of trucks using the bridges or close the bridges.

The Department did not fully follow the prescribed format for submitting information on its bridge capital needs. More importantly, we believe the Department could have provided better information to the Department of Treasury Board and Finance to allow decision makers to better understand the risks of different funding levels on safety, service levels and future funding needs.

What needs to be done

The Department needs to improve the quality and timeliness of inspections, contracting processes and use of data. Weaknesses in these areas limit the Department's ability to conclude that the bridges are maintained to its standards to maximize use and minimize cost over the life of each bridge.

We recommended that the Department:

- improve its processes for visual inspections of bridges—Recommendation 1
- better monitor that contractors comply with standards and ensure they are properly certified—Recommendations 2 and 3
- ensure timely bridge inspections—Recommendation 4
- improve contracting processes for visual inspections and regularly assess if contracting out the inspections is cost effective—Recommendations 5 and 6
- better control access to its information systems for bridges—Recommendation 7
- improve regional reporting of inspection results and remedial actions—Recommendation 8
- improve its capital planning submissions—Recommendation 9

Audit objective and scope

Our audit objective—to assess if the Department has effective systems to manage the structural safety of bridges.

Scope of audit—we examined the Department's systems to manage 4,400 bridges on the provincial highways in service during the fiscal year ended March 31, 2011. We did not examine systems to manage bridges on local roads owned by the Province but managed by municipalities or cities. We conducted our audit work between April 2011 and August 2012.

We examined the Department's systems to:

- establish standards for inspecting and maintaining bridges and large culverts
- perform the inspections and do maintenance
- identify when bridges need major rehabilitation or replacement

We used a structural engineer with a background in design and maintenance of bridges to help us assess the design of the Department's inspection system. Our expert reviewed the Department's inspection manuals, training and certification process, and quality assurance process. He also reviewed the Department's bridge expert analysis and decision support system tool (BEADS tool) used by the Department to calculate when to rehabilitate or replace bridges.

We used another structural engineer to perform 10 inspections for us and aid us in assessing the completeness of the Department's inspection manuals and the ease of using them when performing the inspections.

Background

The Department is responsible for building and maintaining provincial highways, including all bridges and culverts on the highway network. Bridges and culverts on local roads are generally the responsibility of municipalities, towns and cities.

Bridge types—the Department classifies bridges as follows[1]:

- Major bridges are typically built from site-specific drawings but can also be built from standard girder drawings. Typically, major bridges are river crossings, highway interchanges or railways crossings.
- Standard bridges are built using standard bridge design drawings and generally are comprised of standard precast girders, with steel or concrete substructure elements, and supported on steel or concrete piles. Typically, standard bridges are river crossings.
- Culverts are cylindrical structures made of metal or concrete. They manage water flows under roadways. Bridge-size culverts have a diameter at least 1,500 mm, or where several culverts are at the same location, the total diameter of all of them is at least 1,500 mm.

The Department manages about 4,400 bridge structures:

• Major bridges	1,000
• Standard bridges	600
• Culverts	2,800

All bridges have a number of components. For major and standard bridges, the components are the approach road, the superstructure (top of the bridge), the substructure (foundation of the bridge), and the channel the bridge passes over. Each component can include several elements. For example, the superstructure includes several elements such as the railing, deck and girders. Main culvert components are the approach road, the culvert barrel, the upstream and downstream ends of the culvert, and the channel.

The Department's tools to gather information—the Department has developed tools to compile all information on the bridge inventory and collect data generated by bridge inspections.

Inspection types and program—the Department designed an inspection program to assess the safety of bridges, identify if maintenance is needed and when, and provide information to decide when bridges should be either rehabilitated or replaced.

Inspection is one of the key components of any bridge management system. The Department has established two types of bridge inspections and documented the standards for each type in inspection manuals:

- Level 1 inspections are visual assessments of the bridge's condition, using basic tools and equipment, performed on all bridges, and on culverts with diameter of 1,500 mm or larger.
- Level 2 inspections are in-depth inspections using specialized equipment. They are conducted on bridges that have known structural deficiencies or need frequent monitoring due to age, design or traffic.

[1] Department of Transportation's website – www.transportation.alberta.ca

The Department does ultrasonic testing of older steel bridges to check for cracks in places where steel parts are connected.

The Department also tests concrete bridge decks, which included removing small samples of concrete from the bridges and testing them in a lab to check the chloride content. High chloride levels may accelerate the corrosion of the reinforcing steel.

The Department determines the frequency of both types of inspection.

- All bridges have level 1 inspections, at a frequency between 21 and 57 months, depending on the type of bridge and the type of roadway it's on.
- About 600 bridges with concrete decks and 120 bridges with metal trusses have level 2 inspections at four- to six-year intervals. The Department schedules tests for about 120 concrete decks and 20 bridges with metal trusses annually.
- All other level 2 inspections, described in the level 2 inspection manual, are performed as needed.

Through membership in professional and industry associations, the Department receives information about bridge failures in other places. It uses this information to evaluate whether its bridges are susceptible to factors causing the other bridge failures. When the Department detects these conditions, it will inspect the affected bridges and repair them if necessary.

The Department's manuals detail the:

- qualification and training of bridge inspectors
- rating scale inspectors use in level 1 inspections to assess bridge conditions
- bridge information system that stores data on bridges and level 1 inspection results

All bridge inspectors must complete the Department's training and certification program. Two levels of certification are available: Class A inspectors can inspect all bridges, while Class B inspectors can inspect only standard bridges and culverts. Candidates must pass exams based on classroom training and obtain sufficient experience under the guidance of a Class A inspector.

The Department initially certifies inspectors for three years, with the option to renew the certification. A three-person panel of senior Department bridge people assesses the number of inspections the applicant completed in the prior three years, and any knowledge they have of the quality of the applicant's work and recommend re-certification to the director of bridge engineering. When the director approves the application, the applicant's certification is renewed for another three years.

Outsourcing level 1 inspections

The Department outsources level 1 inspections. Contracts are for three years, and include doing the inspections, reviewing the results for completeness and compliance with the standards, and data entry. The Department issues requests for proposals that outline the qualifications of inspectors and reviewers, the criteria the Department will use to assess the proposals, the total number of structures to be inspected in the three years, and the average number of inspections per year. The Department also contracts with successful applicants to review the inspections reports for local roads, where the municipalities use the Department's information system to manage their bridge inventory.

Regional bridge managers are required to inform the contractors (at the start of each quarter in the fiscal year) of the bridges they must inspect in that quarter. By the end of the quarter, the contractors must inspect, review, and enter the inspection results into the Department's information system. Contractors must provide electronic and hard copies of the inspection reports to the Department within one month of the inspection date. The Department's bridge managers, or their designates, must approve the inspections before the bridge inventory is updated for the results of bridge inspections.

In addition to the contractors' review of the inspections and the Department's review and acceptance of the inspections, as described above, the Department's quality assurance process requires annual audits of inspections to assess whether contractors followed its standards in completing the inspections. The Department's process is to annually select two regions, re-perform a sample of inspections, and compare the results.

Two Department Class A inspectors re-perform the inspections and evaluate the quality of the inspections. The Department uses a four-point ranking, from 1 (unacceptable) to 4 (very good), to evaluate the overall inspections, the completeness of the maintenance recommendations, and the quality of the inspectors' assessments of the four main components:

1. The approach road, signing, and utilities
2. The superstructure
3. The substructure or barrel for culverts
4. The channel

The Department reports its findings, including any non-compliance with the standards, to the Bridge Inspection and Maintenance Committee.

Findings and recommendations

Design of level 1 visual inspections

Recommendation: Improving inspection process

1 RECOMMENDATION

We recommend that the Department of Transportation improve its inspection processes by ensuring that it collects all the information it needs to assess the quality of inspections.

Criteria: the standards for our audit

The Department should have a bridge inspection program that evaluates bridges against prescribed standards and recommends appropriate maintenance strategies:

- Detailed visual inspections should be performed regularly.
- The entire history of the bridge should be properly documented and easily accessible to inspectors.
- Inspectors should be qualified and properly trained.
- A quality assurance process should be put in place to verify the reliability of the data generated during the visual inspections.
- Comprehensive assessments involving invasive or destructive techniques should be done as soon as a significant change in the condition of the bridge is noted or the structure is found to be in an overall poor condition.

Our audit findings

Key findings

- The Department has well-structured and comprehensive manuals to guide inspectors and the inspection forms are clear and well organized.
- The Department does not collect information on the time spent for inspections and the number of inspections done in a day.
- The Department does not assess whether the number of inspections done in a day and the time spent on inspections affects the quality of the inspections.

The Department's approach to bridge inspection is similar to approaches of other international jurisdictions. It is based on visual examinations. We found the following:

- The Department has well-structured and comprehensive manuals that inspectors can rely on when performing inspections. They provide abundant information on the different degradation phenomena likely to affect each type of material in bridges and culverts. The bridge inspection manuals have detailed recommendations on how to inspect structures.
- The Department's policy to modulate inspection frequency according to the characteristics and condition of the structure is reasonable and in line with the practices of other transportation agencies in Canada.
- The forms to be filled out by inspectors are a strong point in relation to other Canadian jurisdictions. The inspection forms for both level 1 and 2 inspections are adequate tools to ensure uniformity and completeness of information collected during inspections. The information in the forms is clear and well organized and the forms have the flexibility to adequately handle a variety of bridge structures with special features.
- The system used to rank maintenance activities is adequate and the timelines established for maintaining and repairing bridge structures are reasonable.
- Similar to other Canadian jurisdictions, the Department requires bridge inspectors to be certified. The Department's certification process requires candidates to take the Department's training courses, pass exams and complete inspections under the supervision of a certified inspector.
- The Department's manuals and training materials are well structured and well written.
- The requirement for a second contractor to review each inspection report before it goes to the Department should improve the quality of inspection data in the Department's system.
- The Department's manuals provide inspectors performing level 1 inspections with guidance on when to recommend level 2 inspections, for specific conditions that are visible or apparent. This could include recommending level 2 inspections to take core samples for timber elements or taking detailed culvert barrel measurements.
- The Department's head office bridge staff schedule level 2 inspections for concrete decks and trusses. Based on the results, they determine if changes need to be made to the regular inspection cycle. They also may schedule other specialized inspections based on specific conditions of bridges. The Department's manuals provide sufficient guidance to inspectors on performing these inspections.

But the Department can improve the design of the level 1 inspection process. The Department does not require inspectors to record the travel time between bridges, or the start and end time of each inspection. It cannot tell whether the number of inspections done in a day, and the time spent on each inspection, affect the quality of inspections. Neither can it tell if the rates it pays for inspections are reasonable.

The Department has not issued guidance on the time required to complete a bridge inspection in accordance with its standards. Several factors such as the age of the bridge, its size and accessibility, would prevent using one average time for all structures. However, time estimates could be useful to the Department when selecting inspections for its spot audits.

We think that the Department should assess whether the time spent doing the inspections and the number of inspections done in a day reduces the quality of the inspections. The 2011 spot audits found 36 maintenance recommendations that inspectors had missed for the 12 inspections tested. The same contractor had done several inspections in one day. In the 2008 spot audits, a contractor with below-average performance had done more than 10 inspections in one day.

Implications and risks if recommendation not implemented

The Department may not have all the information it needs to remedy poor contractor performance. This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

Quality of inspections

Background

The Department established the Bridge Inspection and Maintenance Committee to deal with operational and developmental issues in its bridge information system. These include identifying operational problems and making recommendations, such as the need for an audit to ensure the accuracy and consistency of information reported in the systems.

Recommendation: Assessing quallty of inspections

2 RECOMMENDATION

We recommend that the Department of Transportation regularly assess whether contractors perform inspections following its standards and take corrective action if they do not.

Criteria: the standards for our audit

The Department should have a process to assess whether contractor inspections follow the standards and what corrective actions to take based on the results.

Our audit findings

Key findings

- The Department developed a spot-audit process to monitor the quality of inspections but did not follow it consistently. Spot audits were not done for two of the prior four years.
- Spot audits found inaccurate inspection ratings.
- The Department lacks a process to remedy poor contractor performance.

We examined the Department's audit reports of contractors' work to its bridge inspection and maintenance committee in December 2008. The Department had not followed its own process. It selected only one contractor for testing in each of 2007 and 2008, and did no spot audits for 2009 or 2010. Despite assessing one contractor's performance as below average, the Department did no spot audits of this contractor in 2009 or 2010. So it could not show that it had remedied the contractor's poor performance.

We could not assess what the committee did in response to the audit results because the committee did not meet between December 2008 and December 2011. The Department selected contractors for the three-year period starting April 2009, within a few months of the December 2008 committee meeting. Therefore, we wanted to assess whether the Department considered the results of the spot audits when selecting contractors. Four members of the committee, who were present at the December 2008 meeting, were on the selection committee for the 2009–2012 contract. The Department excluded performance from its selection criteria. The Department said the purpose of the spot audits is not to influence contractor selections—it is to ensure that the Department is getting good inspections.

In 2011, the Department re-performed a sample of inspections in one region, and concluded that the inspections met its standards. But it did not select for review contractors it had previously assessed as below average, or contractors it had not assessed.

Our review of the Department's 2011 spot audits found that:

- For 11 of the 12 structures the Department re-inspected, its staff found 36 maintenance recommendations that should be done in 2012 that contractors had not identified.
- The Department's staff consistently rated the condition of some bridge parts lower than the contractor's inspector did.
- An inspector who performed 8 inspections in one day missed 26 maintenance recommendations. Of the 1,700 inspections done in the 2010–2011 fiscal year, on 75 days, inspectors did 10 or more inspections in one day.

The Department lacks a process to remedy poor performance by inspectors, such as requiring inspectors to take additional training, or monitoring the quality of future inspections, or re-testing their knowledge of the inspection standards.

The Department has not established risk factors for selecting which inspections to check. Risk factors could include the number of inspections done by individual inspectors, large numbers of inspections per day, or prior poor performance.

Implications and risks if recommendation not implemented

Inspections may not meet the standards in assessing the quality of the bridge elements and may not identify all required maintenance. This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

Inspector certification

Recommendation: Proper certification of contractors

3 RECOMMENDATION

We recommend that the Department of Transportation ensure that contractors who perform inspections are properly certified.

Criteria: the standards for our audit

The Department should accept inspections only if the contractors who perform and review them have valid certification.

Our audit findings

Key findings

- The Department overode its control to ensure that only inspections completed by certified inspectors can be entered into the bridge information system.
- About 50 per cent of inspections were done by inspectors whose certification had lapsed.

When the Department renewed inspectors' certification, it followed its process. A three-person panel of senior bridge people recommended the re-certifications and the Director of Bridge Engineering approved the panel's recommendations.

The Department did not monitor whether inspectors were certified. In the year ended March 31, 2011, about 900 of the 1,700 inspections completed were performed by contractors whose certification had lapsed at the time of the inspections. About 200 inspections were reviewed by contractors whose certification had lapsed at the time of the reviews.

The Department has a control to ensure that only inspections completed by certified inspectors can be entered into the bridge information system, but overrode it for about half the inspectors. The system accepts inspection data only if the end-date of the inspector's certification is later than the inspection date. But one member of the three-person panel overrode the control by entering new end dates for inspectors whose certification had lapsed.

Implications and risks if recommendation not implemented

This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

Timeliness and completeness of inspections

Background

The Department relies on the bridge managers in its four regions to ensure that all level 1 bridge inspections are done at the frequency the standards require. Bridge managers can run reports that list the dates inspections should be done, as well as overdue inspections for their regions.

The Department's head office schedules level 2 inspections for ultrasonic testing of bridge trusses and concrete decks. Any other level 2 inspections are scheduled by the regional bridge managers.

The Department keeps spreadsheets for the level 2 inspections with the dates of the last inspection and the date when the next inspection should be done.

Recommendation: Inspection of bridges

4 RECOMMENDATION

We recommend that the Department of Transportation ensure that bridges are inspected as frequently as its standards require.

Criteria: the standards for our audit

The Department should inspect all bridges as frequently as its standards require.

Our audit findings

Key findings

- Timing of bridge inspections followed Department policy in three of the four regions. In the fourth region, about 150 inspections were done more than a year after they were due.
- The Department's reporting processes did not identify that bridge inspections were late or missed.
- Department policy requires pedestrian bridges to be inspected, but regions did not inspect 15 pedestrian bridges because they considered them low risk.
- Regions did not inspect several structures and could not explain why.

Timeliness and completeness of level 1 inspections

Three of the four regions had effective processes to monitor that inspections were done when required; one region did not. This region's processes to schedule inspections did not include running the report of overdue inspections. It had not scheduled some bridges because it used its own system to identify when bridges should be inspected, and its system did not include all the bridges in the region. The region also scheduled all the bridges on one road for inspection at the same time, regardless of when the inspections were due. As a result, at March 31, 2011, the region had more than 150 inspections that were more than one year late.

The regions subsequently completed the inspections that were overdue at March 31, 2011, with the exception of:

- 15 pedestrian bridges that Department policy requires be inspected, but regions did not inspect because they considered them low risk
- seven culverts and two bridges that regions did not inspect and could not explain why

Timeliness and completeness of level 2 inspections

We examined whether the Department had scheduled level 2 inspections consistent with its timelines and concluded that they met their timelines.

Inspectors who perform ultrasonic testing must also do a level 1 inspection of the bridge. Head office needed to inform the regions when bridges would be inspected because the regions also scheduled level 1 inspections for almost all of the roughly 20 bridges in question, which led to duplication of effort and unnecessary expense.

Implications and risks if recommendation not implemented

Without inspecting bridges according to its standards, the Department risks having unsafe bridges open. The Department may not maintain the bridges at the optimal time.

Assessing whether to contract out program delivery

Recommendation: Assessing whether to contract out program delivery

5 RECOMMENDATION

We recommend that the Department of Transportation regularly assess whether it should contract out inspections or do them itself.

Criteria: the standards for our audit

The Department should periodically assess if it is more cost effective to outsource inspections or do them itself.

Our audit findings

Key finding

No analysis of the cost effectiveness of outsourcing the inspections has been done since 1997.

For the year ended March 31, 2011, contractors did level 1 inspections on about 1,700 bridges and culverts. The Department paid the contractors about $650,000 to do this work. The contractors did the inspections in about 250 working days—about the number of days that one person works in a year. We recognize that there are bridges in all parts of the province and travel is required. We also recognize that there are qualitative considerations; the advantage of having enough inspectors available to complete the required inspections, and the disadvantage to the Department of not having a sufficient number of internal staff qualified to assess the inspection results. However, the Department did not assess its cost in relation to the time contractors spent doing the inspections, when it contracted for the inspections for either period: 2009–2012 or 2012–2015.

The Department does not have a process that requires its staff to assess whether it is more cost effective to outsource the inspections or have staff do them. The Department confirmed that since the government decided to outsource construction, inspection, and maintenance of roads and bridges in the mid-1990s, the Department has not assessed cost effectiveness of outsourcing—for at least 15 years.

Implications and risks if recommendation not implemented

Without a regular assessment of the costs and benefits of contracting out bridge inspections, the Department may not know if it is getting value for the money it spends on these services.

Contracting level 1 bridge inspections

Background

The Department outsources its level 1 bridge inspections, which include performing the inspections, reviewing them for accuracy and completeness, and entering them into the Department's bridge information system. It also outsources the review of local road inspections, as a service to municipalities that use its bridge information system to manage their bridge inventory.

The Department has established guidelines on contracting in its Project Administration Manual.[2] The manual provides guidance for establishing criteria and weightings for evaluating proposals.

Inspections for the year ended March 31, 2011 were based on contracts for the three-year period from April 2009 to March 31, 2012. The Department communicated the scope of the contract and requirements to applicants, including:

- total number of bridges in each of the four regions of the province, and the average number of bridges to be inspected annually.
- the number of contracts awarded to any contractor is limited to two regions.
- criteria for assessing proposals:

Project comprehension	20 per cent
Resource budget	30 per cent
Project control	5 per cent
Organization	5 per cent
Project team	40 per cent
Total	100 per cent

- inspectors certified by the Department. Class A inspectors for inspecting major bridges.
- Class A inspectors to review the inspections. The reviewers must have held the Class A inspection certification for at least five years and reviewed at least 50 of the Department's inspections in the prior three years.

Recommendation: Contracting level 1 bridge inspections

6 RECOMMENDATION

We recommend that the Department of Transportation improve its process to contract its level 1 inspections by:

- documenting how it establishes criteria for assessing candidates and awards points for each criterion
- ensuring proposal requirements do not limit qualified candidates

Criteria: the standards for our audit

The Department should comply with its Project Administration Manual when contracting inspection work for:

- The request for proposals should include criteria and the weighting assigned to each. A selection committee consisting of three to five experienced and senior staff should review the proposal and agree on the criteria.
- All criteria should initially be assigned the following minimum range value, and then adjusted based on project requirements to give a total score of 100:

Clarification and presentation	0 -10 per cent
Project comprehension	10 - 30 per cent
Resource budget	10 – 20 per cent
Project control	5 – 10 per cent
Innovation	0 – 25 per cent
Project team	20 – 30 per cent
Past performance	30 per cent
Total	100 per cent

2 *Project Administration Manual, October 2006.* www.transportation.alberta.ca/content/doctype29/Production/proj_admin_man.pdf

Our audit findings

Key findings

- The Department did not use its own guidance when establishing criteria, since it excluded past performance from its criteria.
- The Department has not established or documented how it awards points for criteria it uses to evaluate proposals.
- Proposal requirements limit eligible candidates.

We examined the Department's process to contract for level 1 inspections between April 2009 and March 2012 and found that:

- it had not documented how it established the criteria or what factors were awarded points for each of the criteria
- its documentation of the assessment of each proposal did not indicate what factors distinguished one bid from another, or how points were awarded to each
- it could not show how it had incorporated the results of spot audits into the selection of contractors or whether it even had, as it had dropped the performance criterion in assessing the bids, despite the manual's recommending using 30 per cent
- the proposal requirements limited eligible candidates. The proposal required contractors to supply reviewers who had reviewed at least 50 of the Department's inspection reports in the prior three years. This effectively eliminated any contractors who have not previously worked for or had not been employed by the Department.

  The Department said that contractors who review local road inspections for municipalities could meet this requirement—if the municipalities use the Department's forms and system. But the Department contracts for the review of the local road inspections by the same contractors who perform and review the Department's inspections. The Department could not identify who, other than former employees, the previous contractors, or the firms now employing those previous contractors' reviewers, could meet its qualification requirements.

  The contracts for three of the four regions were awarded to contractors who had been Department employees. One contract was awarded to a former employee who left the Department less than four months before the contract was awarded.

Implications and risks if recommendation not implemented

Without a rigorous, fair and transparent contract process, the Department may not be obtaining the best services for the best price.

Controls over access to the bridge information system

Recommendation: Controls over access to the bridge information system

7 RECOMMENDATION

We recommend that the Department of Transportation improve its processes to monitor access to the computer system that manages bridge inventory and inspections.

Criteria: the standards for our audit

The Department should have processes to grant and monitor access to the bridge information system to ensure that staff and contractors have only the access they need to perform their work.

Our audit findings

Key findings

- The Department does not regularly monitor access to the bridge inspection and maintenance system.
- Staff and contractors have access they don't need to perform their work.

Up to June 30, 2012, the Department had not monitored user access to the bridge information system.

The Department does not review the accounts of employees to check if their access roles are consistent with their job description. It also does not review the accounts of contractors to check if their access roles match their contractual obligations.

The Department lacks a process to monitor who had been assigned roles and make corrections. We found the following:

- Some contractors were assigned roles in the bridge information system that allowed them to both enter inspection results and accept the information. Only the department staff should be able to approve inspections, since one control over the quality of inspections is the department's review and acceptance of the results.
- Several contractors and about 20 department staff were assigned a role that would let them change the load capacity of bridges. Commercial road users rely on the accuracy of bridge load ratings when planning their driving routes.

Implications and risks if recommendation not implemented

The Department risks staff and contractors accidently or intentionally creating errors in the information about bridges. Errors in the load ratings or bridges could reduce driver safety. Contractors could override Department's controls if they approved inspections they did.

Maintenance activities

Background

The Department budgets about $15 million annually for maintenance. Typical maintenance for bridges includes minor repairs such as concrete patching, washing, sealing, repairing deck seals, and minor collision repairs. Each region gets a share based on the number of bridges in the region and costs relative to the other regions.

Recommendation: Maintenance activities

8 RECOMMENDATION

We recommend that the Department of Transportation improve the information that senior management receives on inspector activities, results, maintenance and other actions.

During level 1 inspections, inspectors assess the condition of the bridge components, and assign numerical rankings from 1 to 9, using the guidance in the level 1 Bridge Inspection Manual:

- Bridge elements rated 3 or less should have a maintenance recommendation.
- Maintenance recommendations can include any of the following: replacement, repair, rehabilitation, assessment, level 2 inspections, reduce inspection cycle or monitoring.
- Maintenance recommendations should indicate the recommended completion date.

The Bridge Inspection Manual states that the timing of bridge maintenance should generally follow established timelines, depending on the rating assigned to the component:

Rating	Timelines
1	Immediate action.
2	High priority, repairs and maintenance completed within six months.
3	For structural elements, repairs and maintenance should be completed before the next inspection. For non-structural elements, may be delayed if the defect does not impact the life and operation of the bridge.
4-9	Ranges from low priority to no action required.

The Department's head office staff schedule level 2 ultrasonic truss and concrete deck inspections. Results of these inspections go to the Department's head office staff, who review the inspection results and send the inspections and their recommendations to the regional bridge staff.

Criteria: the standards for our audit

The Department should ensure that regional staff review deficiencies the inspection process finds and take appropriate action.

Our audit findings

Key findings

- The Department does not track the results of inspections, their conclusions from reviewing bridge elements ranked as high priority (rank of 2), and whether maintenance they concluded needed to be done, was done in the recommended timelines.
- Senior management does not receive good summary information on the results of inspections, their impact on required maintenance, and confirmation that required maintenance has been carried out.
- In each of the last three years, regions did not spend 15 per cent of their maintenance budgets, despite having a list of necessary maintenance work.

For the level 1 inspections completed in the year ended March 31, 2011, we selected all inspections where bridge components had been rated 1 and checked whether the Department had repaired all components rated 1 immediately, and found that it had.

For bridge elements ranked as 2, inspectors' maintenance recommendations complied with the Department's guidance; they varied from replace to reduce the inspection cycle. A recommendation to repair the bridge element did not automatically result in the work being done within the guideline of six months. Instead, regional bridge staff did their own assessment, of the bridge component rated 2 and the bridge, and decided if repairs or other actions were needed. If their assessment of the inspection results was that maintenance didn't need to be done, the only support for their conclusions might be in the individual bridge file. The regions did not track how they had dealt with all maintenance recommendations ranked 2; they tracked the maintenance they planned to do. Bridge staff at both the head office and the regional offices confirmed that responsibility for maintenance lies with the regions. Head office does not require regional offices to report their maintenance activities, so does not have assurance that appropriate action was taken.

For level 2 ultrasonic testing inspections completed in the year ended March 31, 2011, we selected all inspections where the Department's Class A inspector strongly recommended maintenance work to the regions. We found that regional staff reviewed the recommendations and either completed the maintenance or could support their reasons for not doing the work. The Department does not require regional staff to report the action they took in response to head office staff's recommendations.

Of the $15 million budgeted for routine maintenance, the regions spent about $12.6 million in each of 2010 and 2011. They left about $2.4 million unspent in 2010 and 2011, or about 16 per cent of total funding. This is despite all regions having lists of needed maintenance.

Implications and risks if recommendation not implemented

This increases the risk that deficiencies that affect safety will be missed or repairs necessary to protect the investment will not be done.

Capital planning

Background

The Department is responsible for identifying its capital needs. The Department of Treasury Board and Finance is the capital-planning department. It establishes capital plan requirements, oversees the process where all departments review individual departments' top five requests to ensure that the highest priority projects are considered for funding, and prepares and presents the capital plan recommendations to the Treasury Board Committee that advises the Treasury Board.

The Department of Treasury Board and Finance established criteria for ranking the top five requests, including the health and safety risk, impact on service delivery and physical condition. Each department ranked its own projects out of a possible 150 points.

For the 2012–2017 Capital Plan submission, departments were asked to include:

- their top five requests, over the next three to five years
- 10-year capital requirements
- Updates to the 2011–2016 capital maintenance requests
- total deferred maintenance, as of March 31, 2011

Departments could submit individual projects or bundle projects together if the bundle was more cost effective than individual projects, or if the bundle was clearly defined and of a manageable size to be in the three-year timeframe for priority projects. If a department bundled projects, it was required to provide similar information for each project in the bundle that it would have provided for a single project: the location, constituency and cost data, and score (out of 150 points).

Transportation's tools to plan for future capital needs

The Department developed a tool, called the Bridge Expert Analysis and Decision Support System (BEADS), which it uses to calculate the optimal time to replace each bridge. The input to the BEADS tool is information such as age and what the bridge components are made of, and the most recent level 1 inspection results. The tool estimates the deterioration rate for each bridge component, based on its condition when the inspection was done. It then calculates the best time to rehabilitate or replace the bridge.

The regional bridge staff and the head office staff review the results and incorporate other relevant information, such as planned work on the road that would impact when the bridge work should be done.

Recommendation: Capital planning

9 RECOMMENDATION

We recommend that the Department of Transportation ensure that it gives decision makers the information they need to assess the impact of funding alternatives on bridge safety and protection of the Province's investment.

Criteria: the standards for our audit

The Department should have effective processes to determine:

- the optimal time to rehabilitate or replace bridges
- the impact of various funding levels on the overall physical condition and safety of its bridges
- its deferred maintenance and the impact of deferral on the safety and condition of bridges

The Department should submit its capital plan to meet the Department of Treasury Board and Finance's requirements.

Our audit findings

Key findings

- The Department's process to develop the Capital Plan submission was well-designed, therefore it was able to produce good information for the submission. However, it did not fully follow the prescribed format.
- The Department did not provide sufficient information to the Department of Treasury Board and Finance to allow decision makers to better understand the risks of different funding levels on safety, service levels and future funding needs.

The Department's process to develop its Capital Plan submission was well designed. The Department used its BEADS tool to calculate the optimal time to rehabilitate or replace each bridge. The assumptions regarding the deterioration rates of bridge components were reasonable. However, the Department had not checked how accurate the estimated replacement dates were by comparing them to engineering studies. To compensate, Department bridge staff reviewed of the output and modified the estimates with the results of engineering studies or other pertinent information.

The Department confirmed that the condition ratings based on the level 1 inspections could be conservative, because a bridge component cannot be rated any higher than the worst element comprising the component. However, the Department did not rely solely on the level 1 inspection reports, since bridge staff that developed the capital plan also had the level 2 inspection results and engineering studies to support their ranking of projects.

The final product of this process was a listing of the optimal year to rehabilitate or replace each bridge. The Department used this listing to compile its 2012–2017 capital plan submission. We are satisfied with the reasonableness of this process.

We examined the Department's 2012–2017 Capital Plan submission. The Department did not fully comply with the Capital Plan submission requirements. For example, it did not provide information that would allow decision makers to differentiate the condition and cost of the projects within the large bundle.

Instead, the Department used the listing of the optimal replacement year and the cost of replacing each bridge structure. The Department submitted:

- as its first priority, a bundle of bridge structures, with an individual cost of more than $2.5 million. These projects numbered about 100 and totalled $900 million over 10 years.
- for capital maintenance funding, bridge structures with an individual cost of less than $2.5 million. These projects totalled about $350 million over 10 years.

For the $900 million bridge bundle, the Department also submitted how it identifies bridge needs and a copy of its bridge management strategy guidelines.[3] The Department quantified the percentage of older bridges and explained that many were at or near the end of their useful life. The Department said that bridges at the end of their useful life require extensive rehabilitation work to extend the life a few years. After that, if not replaced, they would be unsafe and the Department would have to close them. The Department said that 45 per cent of bridges were older than 40 years, with 20 per cent older than 50 years.

We understand that the Department of Treasury Board and Finance ultimately found the Capital Plan submission to be sufficient for its needs, as it believes it adequately pointed out immediate critical needs. However, we believe further information on the condition of projects within the large bundle would allow the Department of Treasury Board and Finance staff, and ultimately decision makers, to better understand the impact of different funding levels on risks to safety, service levels and future funding needs.

3 *Bridge Management Strategy Guideline* (version 1.0 – March 2008). www/transportation.alberta.ca/content/doctype30/production/bgmgtstrgyg.pdf

We reviewed the age and condition of each bridge structure in the Department's capital plan submission and found that seven major bridges, seven standard bridges and 65 culverts were over 50 years old and had condition ratings lower than 35 out of 100. The Department estimated that bridges of this era typically have useful lives of about 50 years.

We have an outstanding recommendation to the Department of Treasury Board on information to decision makers *(October 2010 Report).* Some of the factors that the Department of Treasury Board and Finance will need to consider are:

- the impact—on service quality and overall costs—of deferring maintenance
- the impact of different funding levels on safety and use of infrastructure.

The Department's systems would let it provide much of this information to the Department of Treasury Board and Finance.

Implications and risks if recommendation not implemented

The Department risks not giving decision makers the information they need to assess the Department's capital needs.

Environment and Sustainable Resource Development—Climate Change, First Follow-up

Summary

Climate change has far-reaching impacts on Alberta's economy, infrastructure and natural environment, and on human health.

In 2008, the Alberta government released the *Climate Change Strategy* and set targets for reducing emissions intensity and absolute emissions in Alberta.[1] That same year, we audited systems the government used to develop and report on the strategy. We concluded that the targets were based on an economic model that included actions that were not part of the strategy. We also concluded that the Department of Environment and Sustainable Resource Development did not have an implementation plan with specific actions to meet targets and monitor against performance. Such a plan is key to Alberta's success in carrying out the strategy. We made three recommendations to the Department in our *October 2008 Report.*

In 2009, we audited the Department's implementation of the *Specified Gas Emitters Regulation,*[2] *(SGE Regulation),* a key component under the strategy. The *SGE Regulation* sets emission intensity limits for facilities that collectively produce 50 percent of greenhouse gas emissions in Alberta. Unless this regulatory program reduces emissions as expected, the government would have to obtain more reductions in other areas or amend its targets. We made seven recommendations to the Department in our *October 2009 Report.*

In this audit, we followed up on four of the ten recommendations from the 2008 and 2009 audits that the Department indicated it had implemented. See the table below for our audit conclusions on the four recommendations:

Recommendation	Status
October 2008 Report	
Public reporting (no. 11—page 101) We recommend that the Department of Environment and Sustainable Resource Development improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.	Repeated
October 2009 Report	
Data quality (page 40) We recommend that the Department of Environment and Sustainable Resource Development strengthen its guidance for baseline and compliance reporting by: • clarifying when uncertainty calculations must be done • prescribing the minimum required quality standards for data in terms of minimum required frequency of measurement and connection to the period being reported on • describing the types of data controls that facilities should have in place	Satisfactory progress

[1] *Alberta's 2008 Climate Change Strategy*: http://environment.gov.ab.ca/info/library/7894.pdf.
[2] Alta. Reg. 139/2007

October 2009 Report continued	
Use of offsets to meet compliance obligations (no. 4—page 46)[3] We recommend that the Department of Environment and Sustainable Resource Development: • strengthen its offset protocols to have sufficient assurance that offsets used for compliance are valid • assess the risk of offsets applied in Alberta having been used elsewhere in the world	Satisfactory progress
Error correction threshold (page 50) We recommend the Department of Environment and Sustainable Resource Development establish an error correction threshold that considers not only the percentages of emissions or production, but also the dollar impact on the Climate Change and Emissions Management Fund.	Implemented

The Department has not implemented our recommendation to improve its public reporting on climate change. The Department needs to both improve the clarity of public reports on progress toward emission reduction targets and report on government-wide spending on climate change activities. Without clear public reporting on the results and costs of the government's climate change actions, Albertans cannot assess the impact of these actions.

The Department has improved its:
- guidance for facilities on the quality of greenhouse gas data they submit under the *SGE Regulation*
- guidance for offsets and processes that confirm their validity

The Department must assess—based on the 2011 and 2012 compliance periods' results—if it needs to further strengthen its guidance to ensure that the reported data is accurate and reliable. A lack of accurate and reliable data will hinder the Department's ability both to assess whether facilities comply with the *SGE Regulation* and to monitor and evaluate progress toward Alberta's emission reduction targets.

To fully implement the recommendations on data quality and the use of offsets, the Department must:
- assess if it needs to clarify guidance to facilities on the greenhouse gas data uncertainty calculations, on the frequency of data measurement and on data controls, based on the 2011 compliance period's results
- strengthen its conservation cropping protocol by defining data management controls project developers must have
- assess whether it needs to further strengthen the conservation cropping protocol's evidence requirements, based on the 2012 compliance period's results

The Department stated that it will be ready in 2013 for an audit of the remaining six recommendations.

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3 In our *November 2011 Report* (no. 1—page 15), we consolidated this recommendation into a broader recommendation on the Department's guidance. We again recommended that the Department of Environment and Sustainable Resource Development clarify the guidance it provides to facilities, verifiers, offset project developers and offset protocol developers, to ensure they consistently follow the requirements in place to achieve the Alberta government's emission reduction targets. In this audit, we followed up on the tillage offsets portion of the *November 2011 Report's* recommendation.

Audit objectives and scope

Our audit objective was to determine if the Department has implemented the following four recommendations:

- public reporting (*October 2008 Report*, no. 11—page 101)
- guidance on greenhouse gas data quality (*October 2009 Report,* page 40)
- use of offsets (*October 2009 Report,* no. 4—page 46)
- error correction threshold (*October 2009 Report,* page 50)

In performing the audit, we:

- examined internal and publicly available documentation related to all four recommendations
- interviewed management and staff
- examined a sample of compliance reports[4] for the 2010 compliance period and baseline applications[5] the Department assessed in 2010, and the associated verification reports and technical review documentation
- examined Alberta's Quantification Protocol for Conservation Cropping

We conducted our fieldwork from November 2011 to April 2012 and focused on the Department's actions since our 2008 and 2009 public reports.

We also examined the Department's action plans for implementing the other six recommendations from our 2008 and 2009 reports:

- planning (*October 2008 Report,* no. 9—page 97)
- monitoring processes (*October 2008 Report,* no. 10—page 100)
- guidance to verifiers of facility baseline and compliance reports (*October 2009 Report,* no. 3—page 42)
- technical review (*October 2009 Report,* page 45)
- outsourced service providers (*October 2009 Report,* page 49)
- cost-effectiveness of regulatory processes (*October 2009 Report,* no. 5—page 51)

Our examination of the Department's action plans was not a follow-up audit; we did not perform detailed testing to conclude whether the recommendations were fully implemented. Instead, we set out to answer three questions:

- Does the Department have plans to implement our recommendations and is it tracking its own progress?
- Do these plans target key risk areas identified in our reports?
- Is action taking place?

Findings and recommendations

Public reporting—recommendation repeated

Background

In our *October 2008 Report* (no. 11—page 101), we recommended that the Department of Environment and Sustainable Resource Development improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.

Alberta's 2008 *Climate Change Strategy* identified the following targets:

- 2010—reduce emissions by 20 Mt[6] below business as usual[7]
- 2020—reduce emissions by 50 Mt below business as usual
- 2050—reduce emissions by 200 Mt below business as usual and 14 percent below 2005 emissions

[4] A compliance report compares a facility's annual emission intensity against its emissions intensity limit.
[5] A facility's baseline emissions intensity is an emissions intensity that represents the facility's normal operating conditions in a given year and is used to develop a facility's emissions intensity limit.
[6] One megatonne (Mt) equals one million tonnes.
[7] Business as usual means emission levels in the absence of any new government policy.

With the *Climate Change Strategy,* the government expects Alberta's absolute emissions[8] to increase until 2020 and then begin to decline (see Appendix B, Table 2). The economic modeling done in 2008 to develop the strategy targeted Alberta's emissions to be as follows:

- 2010—235 Mt
- 2020—260 Mt
- 2050—184 Mt

The Department of Environment and Sustainable Resource Development is updating the 2008 modeling[9] and expects to complete its analysis of the results in 2012. The Department will then assess whether the actions in the strategy need to be updated to meet the targets.

The *Climate Change and Emissions Management Act*[10] sets a 2020 target for Alberta to reduce greenhouse gas emissions intensity[11] by 50 percent below 1990 levels.[12]

Criteria: the standards for our audit

The Department of Environment and Sustainable Resource Development should report on climate change results, evaluate the results and provide feedback to decision makers. The Department should:

- publicly and promptly report progress against overall targets and goals
- implement a system to measure and report—accurately and completely—on climate change policy spending

Recommendation: Public reporting

10 RECOMMENDATION

We again recommend that the Department of Environment and Sustainable Resource Development improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.

Our audit findings

Key findings

- The Department has not publicly reported on progress against the legislated emissions intensity target.
- Public reporting against the 2008 strategy uses interim targets not comparable to the reported results
- There is no public reporting either on government-wide spending or on emission reductions from climate change actions.

Emissions reporting against legislated target

Since 2007, the government has not reported on the province's progress against the emissions intensity target established by the *Act.*

8 Absolute emissions are the total greenhouse gas emissions produced, usually measured annually.
9 Economic modeling was done in 2008 to develop the Strategy. Previous modeling was done in 2002 to develop Alberta's 2002 climate change action plan.
10 SA 2003, c C-16.7v
11 Greenhouse gas emissions divided by gross domestic product.
12 SA 2003, c C-16.7v, Section 3(1)

Emissions reporting against the strategy

The Department reports Alberta's absolute emissions in the ministry's annual report and, starting in 2012, in *Measuring Up.*[13] These 2012 reports showed that Alberta's absolute emissions declined between 2007 and 2010. The reports compared actual emissions against an interim target the Department derived from modeling done to develop the strategy. Clarity would improve if the reports:

- disclosed information such as the source for the interim target and how the target relates to the targets in the strategy
- included the long term—2020 and 2050—targets from the strategy, stated in megatonnes of emissions

The Ministry Annual Report Standards[14] require comparison of reported results against a comparable target. The 2012 Ministry annual report and *Measuring Up* report used estimated 2012 emissions as an interim target. This target is not comparable to the reported (2010) results, as the target relates to a different (2012) reporting period.

The Department did not report on the 2010 target stated in the strategy because the business-as-usual for the 2010 target was based on economic modeling done in 2002[15] using data, such as the price of oil, that are now out of date. The Department did not disclose this information in its public reporting.

Notwithstanding the decline in absolute emissions and management's decision not to report against the 2010 target, the Minister of Environment and Sustainable Resource Development publicly acknowledged in May 2012 that Alberta likely did not meet the 2010 target from the strategy.[16] This acknowledgement created additional inconsistencies and confusion about Alberta's emission targets and the government's progress in meeting them.

Absolute emissions versus reductions from climate policies

Reporting absolute emissions alone does not inform Albertans about changes in Alberta's emissions as a result of the government's climate change policies. Absolute emissions are subject to factors such as economic growth or decline, population and weather. Relevant public reporting should include reports on the actual effects—in terms of reduced emissions—of the government's climate change policies and actions, in addition to reporting on absolute emissions. We recommended in our *October 2008 Report* that the Department develop a system for evaluating the effects of its climate change policies. We plan to follow up on this recommendation in 2013.

Reporting on climate change costs

In its 2012 annual report, the Ministry reported the costs incurred by the Department in implementing the *SGE Regulation.* Some costs were reported as part of the Department's expenses of $36 million, while others were reported as part of the Climate Change and Emissions Management Fund's expenses of $76 million. This reporting does not allow the public to know the total spending to implement the *SGE Regulation.*

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[13] The *Measuring Up* report is a component of the Government of Alberta's annual report. It provides information on the government's progress in meeting social and economic goals published in the previous year's government business plan.

[14] The Ministry Annual Report Standards are issued by the Ministry of Treasury Board and Finance and support the reporting requirements of the *Government Accountability Act* and the *Legislative Assembly Act.*

[15] Economic modeling was done in 2008 to develop the Strategy. Previous modeling was done in 2002 to develop Alberta's 2002 climate change action plan.

[16] Calgary Herald. May 18, 2012. Alberta admits it likely missed its greenhouse gas reduction targets.

The 2012 *Measuring Up* report reported costs of some of the climate change actions being implemented under the strategy. There was no public reporting in the *Measuring Up* report or elsewhere on government-wide spending on climate change. The Department is implementing a system for capturing information on climate change spending by the government.

The Department intends to publish a report in 2013 on government-wide spending and performance information on climate change activities.

Implications and risks if not implemented

Without clear public reporting of results in relation to comparable targets and total costs, Albertans cannot assess the government's progress toward Alberta's climate change goals or determine whether the overall investment in climate change actions is yielding the expected results.

Error correction—implemented

Findings

The Department implemented our *October 2009 Report* recommendation on error corrections (*October 2009 Report,* page 50), which asked the Department to consider not only the percentages of emissions or production in its decisions on error corrections, but also the dollar impact on the Climate Change and Emissions Management Fund.

The Department set the threshold for errors in facility baseline or compliance reports at two different levels, depending on the facility's total annual emissions. The Department lowered the threshold to two percent for large facilities—with total annual emissions above 500,000 tonnes of CO_2e[17]—and maintained the five percent threshold for all other facilities.

When errors are identified—whether by facilities, third-party verifiers or the Department's verification process—the Department determines the required corrective action based on the nature and magnitude of the error, including the error's effect on the Climate Change and Emissions Management Fund. The Department's guidance for facility baseline and compliance reports describes the standard error correction decision process and acknowledges that the required correction may deviate from the standard in specific situations.

The Department followed these processes for a sample we tested.

Greenhouse gas data quality—satisfactory progress

Background

In our *October 2009 Report* (page 40), we recommended that the Department of Environment and Sustainable Resource Development strengthen its guidance for baseline and compliance reporting by:

- clarifying when uncertainty calculations must be done
- prescribing the minimum required quality standards for data in terms of minimum required frequency of measurement and connection to the period being reported on
- describing the types of data controls that facilities should have in place

Greenhouse gases and uncertainty

Measurement of greenhouse gases is by nature subject to uncertainty, including scientific as well as estimation uncertainty.[18]

[17] CO_{2e} is an abbreviation of 'carbon dioxide equivalent' and is the internationally recognized measure of greenhouse gas emissions. Using CO_{2e} as a measure of greenhouse gas emissions allows comparison of the greenhouse impact of a variety of greenhouse gas emission sources.

[18] International Standard on Assurance Engagements (ISAE) 3410, *Assurance Engagements on Greenhouse Gas Statements:* http://www.ifac.org/

Scientific uncertainty

This type of uncertainty arises from incomplete scientific knowledge about how to accurately measure greenhouse gases. For example, there is inherent uncertainty in measuring the rate of greenhouse gas sequestration in biological carbon sinks[19] or combining emissions of different gases and reporting them as carbon dioxide equivalents. The degree to which scientific uncertainty affects the quantification of emissions is beyond the control of the facility reporting on its emissions.

Estimation uncertainty

This type of uncertainty results from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge. Estimation uncertainty may relate to the data on which an estimate is based or to the estimation method itself. The facility reporting on emissions can often control the degree of estimation uncertainty. Reducing the uncertainty ordinarily involves greater cost.

Uncertainty may be very high if, for example, a significant proportion of the entity's reported emissions are from fugitive[20] sources (such as tailings ponds) that are not monitored or estimation methods are not sufficiently sophisticated.

Department's guidance

The Department has identified six data measurement and six calculation method categories that facilities may use for estimating emissions (see Appendix A). Each has an associated level of accuracy, depending on the measured data (such as fuel consumption) and the calculation method (such as mole balance).[21] The data and method a facility uses will affect the degree of uncertainty in the calculation, which in turn can make a material difference on the calculated emissions. For example, measurements taken once a year might not accurately represent variations in fuel composition during the year.

Facilities can use the two data measurement and one calculation methods that are the least accurate (see Appendix A—methods below solid line) only when they can clearly demonstrate that the level of uncertainty in the calculation would not materially affect the calculated emissions. Facilities may also use facility or sector-specific calculation methods when they can demonstrate these methods will result in a higher accuracy of reported emissions. Facilities using these alternative calculation methods must explain the uncertainty associated with the method. The Department stated that facilities used alternative methods only for negligible emissions sources.

International standards

The International Organization for Standardization is a worldwide federation of national standards bodies. ISO has developed standards for the measurement of greenhouse gases (ISO 14064-1)[22] and for their verification (ISO 14064-3).[23] ISO 14064-1 requires organizations to assess the impact of uncertainty on the data they submit and advocates inclusion of the uncertainty assessments in organizations'

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19 Carbon sinks are a physical unit or process that removes greenhouse gases from the atmosphere. The main natural sinks are oceans and plants and other organisms that use photosynthesis to remove carbon from the atmosphere.

20 Fugitive sources are intentional or unintentional release of gases from human-caused activities, excluding the combustion of fuels. Source: International Panel on Climate Change Guidelines. http://www.ipcc-nggip.iges.or.jp/public/gp/bgp/2_6_Fugitive_Emissions_from_Oil_and_Natural_Gas.pdf

21 Mole balance with efficiency factors is a method of quantifying greenhouse gas emissions. It determines an emission factor based on the mole balance of carbon between the input and the output of a source, with some assumed efficiency factor: http://ccemc.ca/_uploads/CCEMC-458-Validation-Guidance3.pdf

22 ISO 14064-1 International standard: Greenhouse gases—Specifications with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals: http://www.iso.org

23 ISO 14064-3 International standard: Greenhouse gases—Specification with guidance for the validation and verification of greenhouse gas assertions: http://www.iso.org

greenhouse gas reports.[24] ISO 14064-3 provides guidance on the validation and verification requirements for greenhouse gas reporting. We consider these standards to be best practices.

International Standard on Assurance Engagements (ISAE 3410)[25] was approved by the International Auditing and Assurance Standards Board in March 2012. This assurance standard provides requirements and guidance specific to assurance engagements on greenhouse gas statements. ISAE 3410 requires that, in forming assurance conclusions on greenhouse gas statements, practitioners consider whether the statements provide adequate disclosure of uncertainties so that intended users can understand the significant judgements made in quantifying emissions.

The Department is working with the Alberta Institute of Chartered Accountants and the Association of Professional Engineers and Geoscientists of Alberta to develop:

- verification requirements to a reasonable level of assurance
- accreditation requirements for verifiers

The new verification requirements will apply starting with the 2012 compliance period. The Department is considering the ISO 14064-3 and ISAE 3410 standards to assist with this process.

Criteria: the standards for our audit

The Department of Environment and Sustainable Resource Development should clearly define and communicate the methods it expects facilities to use for calculating emissions and production.

Our audit findings

Key findings

- The Department strengthened its guidance by requiring the disclosure of detailed information on data and methods facilities use for their estimates.
- The Department clarified the guidance it provides facilities on the required accuracy of quantification methods but has to assess whether additional guidance is needed for uncertainty calculations and frequency of emissions measurement.
- The Department continues to develop guidance for quantifying emissions from tailings ponds and around facility data controls but needs to update its guidance for any new requirements.

Uncertainty calculations for emissions estimates

The Department revised its guidance to facilities by stating it expects them to use the most accurate methods available for reporting their emissions estimates. If the most accurate method is one of those the Department specifically supports (see Appendix A—methods above solid line), it does not expect facilities to assess the impact of uncertainty related to the method. The Department concluded that this is acceptable because it understands the uncertainty associated with those methods.

The Department requires facilities to assess the impact of uncertainty associated with the method used only when facilities use alternative methods. Since facilities have used such methods only for reporting negligible emission sources, the Department did not enforce its guidance requiring uncertainty calculations. Nor did the Department revise its guidance accordingly.

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[24] Section 5.4 ISO 14064-1International standard: Greenhouse gases—Specifications with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals: The organization should complete and document an uncertainty assessment for greenhouse gas emissions and removals, including the uncertainty associated with emission and removal factors. Section 7.3.2 ISO 14064-1: International standard: Greenhouse gases—Specifications with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals: The organization should consider including in the greenhouse gas report: uncertainty assessment description and results, including measures to manage or reduce uncertainties.

[25] International Standard on Assurance Engagements ISAE 3410—Assurance Engagements on Greenhouse Gas Statements: http://www.ifac.org

Previously, the Department stated which methods it allowed, but did not explicitly require that facilities use the most accurate method available. As a result, verifiers[26] identified instances where facilities used less accurate, but allowed methods even though they had the facility-specific data needed to apply a more accurate method. In those cases, the Department has required facilities to resubmit their baseline—and compliance reports, if necessary—using the more accurate method. The revised guidance applied starting with the 2011 compliance period.

Uncertainty calculations for tailings pond emissions

Verifiers for two facilities with tailings ponds emissions reported significant uncertainty associated with facility measurement of their 2010 fugitive emissions from tailings ponds. The facilities used the most accurate method available at that time for estimating these emissions. The Department is working with industry and university researchers to develop a better method for estimating these emissions. In the meantime, the Department focuses on ensuring that all facilities with tailings ponds use the same method to measure the emissions from their tailings ponds and apply it consistently. The Department is developing specific requirements by the end of 2012 for frequency of measurement and the number of samples collected. The new requirements will apply for the 2013 compliance period. We will follow up on how the Department implemented the new requirements in a separate audit.

Disclosure of data and methods in compliance reports

Starting with the 2012 compliance period, facilities must disclose more detailed information on data and methods in their compliance reports. This information includes:

- measurement methods
- measurement frequency
- meter calibration schedule
- explanations for assumptions used
- emission factors

This additional information will allow the Department to better understand the uncertainties and variability associated with the quantities reported in facility reports, whether a facility's selected approach is reasonable in the circumstances, and will reasonably minimize the uncertainties in data to meet the Department's requirements.

Guidance on data quality

The Department continues to strengthen its guidance on data quality. In addition to developing requirements for the minimum frequency of measurement and sampling for tailings pond emissions, the Department clarified the minimum required frequency of measurement for facilities using the intermittent measurement method.[27] However, the guidance does not clearly define the appropriate frequency of measurement when facilities use other methods and when their emissions data varies during the period.

Guidance on data controls

Once the Department has updated its verification guidance, it must decide whether to give additional guidance to facilities on data controls they should have in place, such as calibration of equipment or checks over manual calculations.

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[26] Independent third parties hired by facilities or the Department to check reported emissions information.

[27] Intermittent (periodic) direct measurements use source (stack) testing, which is a "snapshot measurement in time." Several measurements are taken periodically over the year, and each measurement is extrapolated over a period of time to determine emission values for that period: http://ccemc.ca/_uploads/CCEMC-458-Validation-Guidance3.pdf

To fully implement our recommendation, the Department must:

- decide whether it needs to further clarify its guidance to facilities on completing and disclosing uncertainties, based on the results of the Department's assessment for the 2011 compliance period and in consideration of the ISAE 3410 standard
- identify what additional guidance it needs to provide facilities on the frequency of emissions measurement and the types of data controls facilities should have, and update the facility guidance documents accordingly

Implications and risks if not implemented

Without robust guidance, the Department will miss the opportunity to obtain more accurate and reliable emissions reports from facilities. Lack of accurate and reliable reports will hinder the government's ability to make informed decisions and to monitor and evaluate progress toward targets.

Use of offsets to meet compliance obligations—satisfactory progress

Background

In our *October 2009 Report* (no. 4—page 46), we recommended that the Department of Environment and Sustainable Resource Development:

- strengthen its offset protocols to have sufficient assurance that offsets used for compliance are valid
- assess the risk of offsets applied in Alberta having been used elsewhere in the world

In our 2010 management letter, we recommended the Department collect sufficient evidence for tillage offsets submitted for the 2009 compliance. During the audit of the financial statements of the Climate Change and Emissions Management Fund for the year ended March 31, 2011, we found that the Department did not instruct its verifiers on the specific evidence to obtain for the 2009 tillage offsets. For this reason, we considered the Department's progress in implementing the 2009 and 2010 recommendations unsatisfactory.

In our *November 2011 Report* (no. 1—page 15), we therefore consolidated our recommendation on the use of offsets from our *October 2009 Report* (no. 4—page 46) into a broader recommendation on the Department's guidance. We again recommended that the Department of Environment and Sustainable Resource Development clarify the guidance it provides to facilities, verifiers, offset project developers and offset protocol developers, to ensure they consistently follow the requirements in place to achieve the Alberta government's emission reduction targets. In this audit, we followed up the tillage offsets portion of this recommendation.

In April 2012, the Department issued its protocol for the quantification of the offsets[28] from conservation (no-till) farming. This protocol[29] applies to no-till offsets[30] starting on January 1, 2012.
The underlying source data for no-till projects is maintained by several parties—farmers, landowners,

[28] Government of Alberta, February 2012, *Technical Guidance for Offset Project Developers.* Facilities and sectors not subject to the *SGE Regulation* that are able to reduce their greenhouse gas emissions according to a government approved protocol and that meet the requirements of section 7 of the SGE *Regulation* are eligible to generate offset credits. These credits, once registered and serialized on the *Alberta Emissions Offset Registry*, become a tradable unit that can be bought and sold in the Alberta offset market. Credits remain active until such time as they are submitted to the Department of Environment and Sustainable Resource Development for compliance by a regulated facility, or sold outside the Alberta market place. Credits submitted to the Department are subject to the Department's review and may be verified by verifiers the Department hires.

[29] Government of Alberta, April 2012, *Quantification Protocol for Conservation Cropping.* The protocol merges the *Quantification Protocol for Tillage System Management* and the draft *Quantification Protocol for Summerfallow Reduction.* http://environment.gov.ab.ca/info/library/8561.pdf

[30] Tilling is the act of disturbing the soil in order to place seeds and fertilizer in it, and to aerate it. Tilling results in a more rapid breakdown of organic matter in the soil, and a loss of carbon dioxide from the soil into the atmosphere. Tilling, in addition to the emissions from the farm equipment itself, increases carbon dioxide levels in the atmosphere. No-till farming has the potential to remove carbon dioxide from the atmosphere through the storage of organic matter in the soil. No-till offsets are emissions reductions resulting from shifting from conventional (full till) farming to conservation (no-till) farming.

field agents and project developers.[31] In some instances the farmer and the landowner may be the same individual. Similarly, the field agent and project developer may be the same individual.

The previous protocoll[32] allowed project developers and verifiers[33] to rely on farmer affirmations[34] and farm records as a source of evidence to substantiate no-till practices. It did not define the records each party must have to support the claim of no-till practices by the farmer. As a result, the amount of information collected and maintained by project developers was inconsistent.

The Department requires verifiers to assess whether projects comply with the protocol and the project plans.[35] Starting January 1, 2012, the Department requires verification of offset projects to be completed to a reasonable level of assurance[36] rather than the previous limited level of assurance.[37] The Department is updating its guidance for verifiers, including the offset verifiers, for verifications at a reasonable level of assurance.

To form a conclusion at a reasonable level of assurance, verifiers must collect sufficient and appropriate evidence.[38] Different sources of evidence have different inherent levels of reliability. For example, evidence from an external source is more reliable than internally generated evidence.

The Department allows a report signed by a professional agrologist as corroborating evidence of farm management practices. The agrologist may work for the farm or the project developer, or may be an independent party hired as a consultant. The protocol requires that agrologists have specific knowledge of farm cropping systems.

Criteria: the standards for our audit

The Department's guidance for offset projects and for the verification of reductions from offsets should be sufficiently robust to ensure the offsets are valid.

31 Farmer: Individual responsible for operating tillage equipment and managing field activity; Landowner: Individual who has legal ownership rights of field; Field Agent: Individual—contractor or an employee of the project developer—who is responsible for visiting the field, interacting with the farmer and/or landowner and inspecting tillage equipment; and Project Developer: An entity that is responsible for collecting, registering and verifying more than one individual farmer's tillage offset projects and that submits the request for the offset credits registration on the Alberta Emissions Offset Registry. http://environment.gov.ab.ca/info/library/8561.pdf

32 Government of Alberta. February 2009. *Quantification Protocol for Tillage System Management*.

33 A verifier is a third party who is responsible for performing a verification engagement over the greenhouse gas offset credits to a specified level of assurance (limited or reasonable) in accordance with specified verification criteria.

34 An affirmation is a positive verbal or written statement that an activity occurred.

35 Project plan explains how the project will meet the requirements of the *SGE Regulation* and the protocol. The project developer prepares this before project implementation. The project developer must implement the project according to the conditions described in the project plan.

36 In a reasonable level of assurance engagement, a verifier provides an opinion on the relevant information stating that the information is prepared in accordance with specified criteria in all material respects. The nature, timing and extent of procedures performed by a verifier for a reasonable assurance engagement will be more comprehensive than those performed in limited assurance engagement.

37 In a limited level type of assurance engagement, a verifier provides a a conclusion on the relevant information, stating that nothing has come to the verifier's attention that would indicate that the information contains a material error in accordance with specified criteria. The nature, timing and extent of procedures performed by a verifier for a limited assurance engagement will be more limited than those performed in a reasonable level of assurance engagement.

38 *CICA Handbook-Assurance*, Canadian Auditing Standard 500, Audit Evidence. Sufficiency of evidence is the measure of the quantity of evidence. Appropriateness of evidence is the measure of the quality of evidence; that is, its relevance and its reliability in providing support for the practitioner's conclusion.

Our audit findings

Key findings

- The Department improved its guidance for offset protocol and project developers and processes to check for duplicate offsets.
- The conservation cropping protocol describes the records required to support no-till practice but allows some key field activities to be supported by farm records and supporting evidence that may not be from an independent source.
- The Department did not specify the minimum required data management controls no-till project developers must have to support reasonable assurance verifications.
- The Department did not specify the required competencies for professional agrologists providing opinion on farming practices.

Conservation Cropping Protocol

The protocol defines the minimum evidence project developers must collect and maintain to support the claim of no-till practices. The protocol's evidence requirements for soil disturbance activities (such as seeding, reseeding and manure spreading), their extent (determined by the number of equipment passes on the field and the equipment opener width and shank spacing) and the occurrence of irrigation allow project developers to use farm records with corroborating evidence that is not necessarily from an independent source. Independent corroborating evidence, such as equipment purchase receipts or crop insurance records are not a requirement.

As a result, there is a risk that offset claims will be posted to the registry without independent evidence confirming the accuracy of key data such as equipment specifications and irrigation practices. It is our view that such evidence is required to support offset verifications at a reasonable level of assurance.

The protocol allows sign-off by professional agrologists to corroborate farm records for crop type, equipment used, amount of land disturbance, reseeding events and use of irrigation. To confirm these practices would require not only knowledge of cropping systems but also relevant skills and experiences related to such systems. Some professional agrologists may not have all of these competencies. The Department did not identify the required competencies for agrologists providing professional opinion on farming practices or require project developers to maintain evidence validating the agrologist's expertise. The Department has contracted the Alberta Institute of Agrologists to develop—by January 2013—the knowledge and practice standards for agrologists providing opinion on farm management practices.

The protocol and the Department's guidance for offset project developers encourage project developers to have robust data management systems and provide examples of good data controls (such as restricted access to offset data). Individual project developers could have significantly varying interpretations of the data management guidance. A strong control environment will ensure the existence and accuracy of the offset claims and minimize the risk that the offsets are not verifiable to a reasonable level of assurance.

The Department's updated guidance for verifiers is expected to provide more guidance on data controls.

Guidance for protocol and project developers

In 2012, the Department revised its guidance documents for offset protocols and for offset project developers and clarified the areas we identified as ambiguous in our October 2009 audit. In our follow-up audit, we found the following improvements:

- Guidance documents clearly state project eligibility requirements.
- Project guidance requires project plans to disclose any changes in the project relative to the protocol and assumptions about the project.
- Project guidance states the evidence project developers or their agents must have and the procedures verifiers should use to support offset project ownership.
- The ISO 14064-2 standard's principle of conservativeness is incorporated into the Department's guidance to project developers.
- The Department requires protocol developers to demonstrate that the offset activities being quantified in the protocol result in a reduction in greenhouse gas emissions that are additional.[39] The Department assesses additionality prior to approving the protocol and monitors whether an activity continues to be additional, as part of its protocol review.

During our work related to the Climate Change and Emissions Management Fund attest audit, we identified other areas where the Department's guidance documents for offset project and offset protocol developers remain unclear. In our *November 2011 Report,* we reported that the Department's processes for developing offset protocols need improvement. We will follow up, in a separate audit, on these findings and on our recommendations to the Department to:

- clarify the guidance it provides to facilities, verifiers, offset project developers and offset protocol developers (*November 2011 Report,* no. 1—page 17)
- implement processes to ensure that approved offset system protocols meet its protocol development standard (*November 2011 Report,* no. 1—page 17)
- improve transparency of its protocol development process (*November 2011 Report,* no. 2—page 23)

Processes to check for duplicate offsets

The Department relies on the following processes to ensure offsets used for compliance under the *SGE Regulation* are used only once in Alberta and have not been posted to another registry and sold elsewhere in the world:

- Climate Change Central[40] performs an annual process to check for duplicate offsets within the Alberta Emissions Offset Registry. The Department is working with Climate Change Central and the Canadian Standards Association[41] to automate the process and perform the checks in real time, as projects are registered, rather than at the end of each compliance period.
- The Department has implemented a requirement that project developers must declare, in writing, that the offset they are registering have not been posted to another registry. The statutory declaration requirement became effective for projects submitted to the registry after August 1, 2012.

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[39] Government of Alberta, February 2012. *Technical Guidance for Offset Project Devlopers*. The additionality principle requires that greenhouse gas emissions reductions or removals resulting from an offset project are beyond business-as-usual or sector common practice and all regulatory requirements. That is, the implementation of the project must result in emissions that are lower than what would have occurred otherwise.

[40] http://www.climatechangecentral.com/

[41] http://www.csa.ca/cm/ca/en/home

- Currently, there is no international registry platform that would allow for assessing whether projects are double counted outside of the Alberta registry system. To mitigate the risk that Alberta's offsets have been sold elsewhere in the world, Climate Change Central implemented a quarterly process to scan projects registered on key offset registries. Climate Change Central follows up all identified Alberta projects to ensure they have not also been posted to the Alberta registry.
- The Department's system to detect duplicate offsets relies on project developers to notify the Department and Climate Change Central when they become aware of duplicate offsets.
- The Department continues to monitor other jurisdictions' offset systems. As systems mature, the Department will look at ways to automate the duplication checks between and across systems.

To fully implement our recommendation, the Department must:

- assess whether it needs to further strengthen record requirements in the conservation cropping protocol, based on the results of the Department's assessment for the 2012 compliance period
- define the required data management controls for project developers and the required competencies for professional agrologists
- document its activities to check for duplicate offsets

Implications and risks if not implemented

Without robust systems that confirm the validity of offsets, the Department cannot know if facilities are purchasing invalid offsets to meet their compliance obligations. Invalid offsets mean the emission reductions are not real. Lack of reliable data will impede the government's ability to make informed decisions and to monitor and evaluate progress toward targets.

Outstanding recommendations

We examined the Department's action plans for implementing the remaining six recommendations from our *October 2008 and October 2009* reports (see table below). In each case, we found that the Department has a plan that targets the key risk areas we reported on, is taking action on it, and the implementation timeframe is reasonable. We will complete a follow-up audit on these six recommendations in 2013.

Recommendations
October 2008 Report
Planning (no. 9—page 97) We recommend that the Department of Environment and Sustainable Resource Development improve Alberta's response to climate change by: • establishing overall criteria for selecting climate change actions • creating and maintaining a master implementation plan for the actions necessary to meet the emissions-intensity target for 2020 and the emissions-reduction target for 2050 • corroborating—through modeling or other analysis—that the actions chosen by the Ministry result in Alberta being on track for achieving its targets for 2020 and 2050
Monitoring processes (no. 10—page 100) We recommend that for each major action in the 2008 *Climate Change Strategy,* the Department of Environment and Sustainable Resource Development evaluate the action's effect in achieving Alberta's climate change goals.
October 2009 Report
Guidance to verifiers of facility baseline and compliance reports (no. 3—page 42) We recommend that the Department of Environment and Sustainable Resource Development strengthen its baseline and compliance guidance for verifiers by improving the description of the requirements for: • the nature and extent of testing required • the content of verification reports • assurance competencies
Technical review (page 45) We recommend that the Department of Environment and Sustainable Resource Development strengthen its technical review processes by: • requiring facilities to provide a process map with their compliance reporting and • ensuring staff document their follow-up activity and decisions in the Department's regulatory database
Outsourced service providers (page 49) We recommend that the Department of Environment and Sustainable Resource Development develop controls to gain assurance that data hosted or processed by third parties is complete, accurate and secure. We also recommend that the Department of Environment and Sustainable Resource Development formalize its agreement with its service provider for the Alberta Emissions Offset Registry.
Cost-effectiveness of regulatory processes (no. 5—page 51) We recommend that the Department of Environment and Sustainable Resource Development assess the cost-effectiveness of the *Specified Gas Emitters Regulation.*

Appendix A: Emission estimation methodologies—relative accuracy

Measured Data	Accuracy	Calculation
Monitoring or direct measurement	Most	Mole balance with efficiency factors
Intermittent (periodic) direct measurement		Equipment-specific emission factors
Calculated based on measured surrogate parameters		Manufacturer's emission factors
Extrapolated from historical data		Models based on surrogate parameters
Estimated from design requirements		Generic emission factors
Estimated from agreements	Least	Top-down emission factors

Source: Government of Alberta's *Technical Guidance for Completing Specified Gas Baseline Emission Intensity Applications.* http://environment.alberta.ca/documents/Technical-Guidance-for-Completing-Specified-Gas-Baseline-Emission-Intensity-Applications.pdf

Appendix B: Alberta's total greenhouse gas emissions and emission reduction commitments

Table 1—Alberta's Greenhouse Gas Emissions

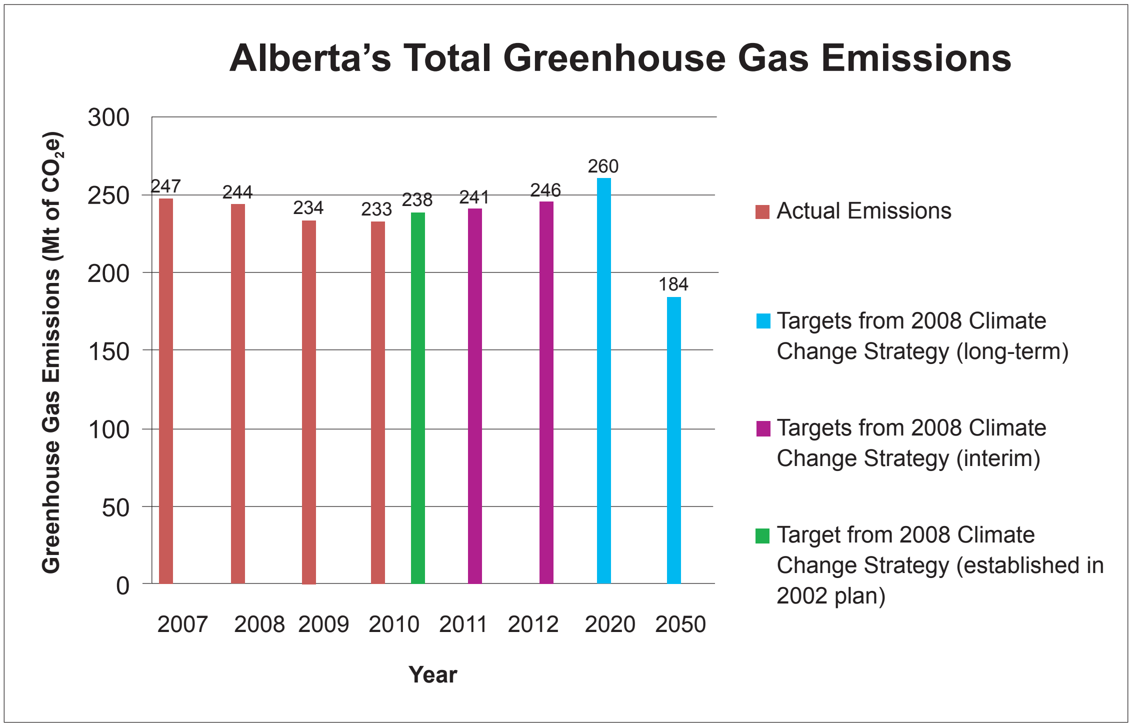
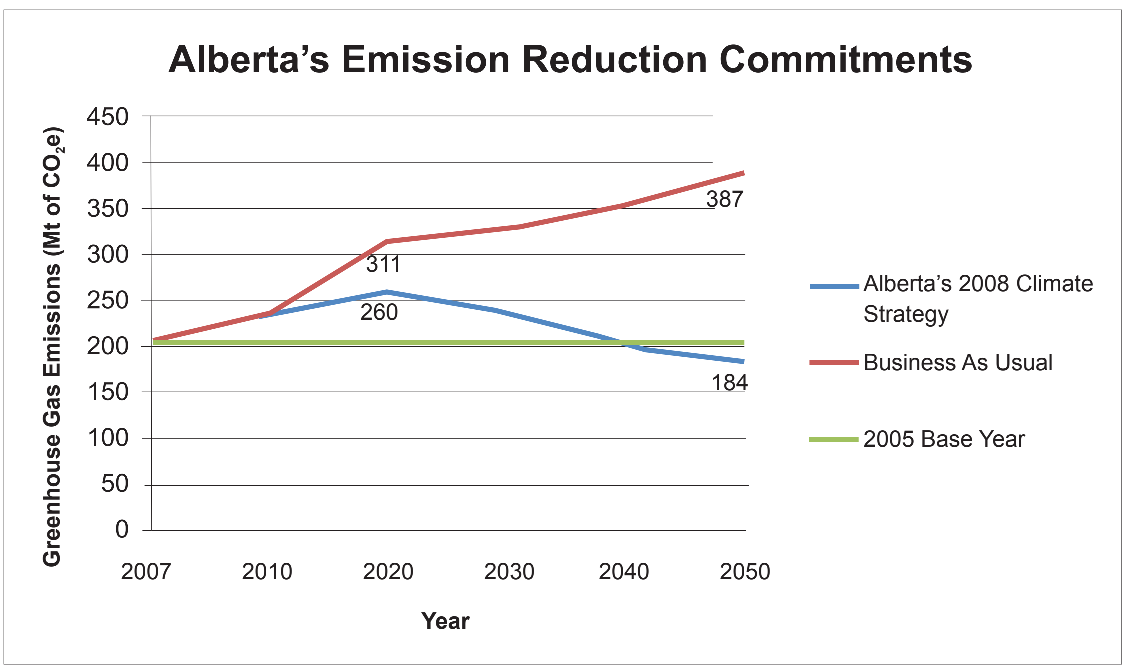


Table 2—Alberta's Emission Reduction Commitments



Source: *Alberta's 2008 Climate Change Strategy*, page 24. http://environment.gov.ab.ca/info/library17894.pdf

Environment and Sustainable Resource Development—Reforestation Follow-up

Summary

Department

The Department of Environment and Sustainable Resource Development (formerly Department of Sustainable Resource Development and the Department of Environment and Water) implemented our recommendations relating to performance measure information, and monitoring and enforcement—see below.

Findings and recommendations

Our audit findings

Matters from prior-year audits

Performance measure information—implemented

Background

In our *October 2006 Report* (vol. 1—page 118), we made the following two recommendations:

Recommendation no. 13—We recommend that the Department of Sustainable Resource Development produce appropriately timed reforestation performance reports to confirm the effectiveness of its regulatory activities.

Recommendation no. 14—We also recommend that the Department of Sustainable Resource Development:

- strengthen its quality control process for performance information
- re-examine whether achieving the target for reforestation rate in harvested areas indicates satisfactory reforestation

In 2009, we followed-up on these recommendations and noted that the Department had still not adequately reported on the effectiveness of its reforestation activities. As a result, we repeated these two recommendations in our *April 2009 Report* (page 52). However, we reworded and combined the two recommendations as follows:

Recommendation no. 2—We again recommend that the Department of Sustainable Resource Development publicly report relevant and sufficient reforestation performance information to confirm the effectiveness of its regulatory systems.

The recommendation was reworded because the Department no longer planned to include in its annual report the performance measure originally referred to in our 2006 annual report.

Our audit findings

We examined the reforestation performance reports generated by the Department. We tested the Department's ability to generate performance information by testing data inputs, assessing the modeling assumptions used, checking a sample of cutblock openings, interviewing staff and reviewing relevant Department records.

The Department has expanded the range of performance metrics it reports in its various publications, such as its annual report, business plan and others on its website, to include additional detail on reforestation. The Department has developed two new performance measures. The "Rate of Forest Regrowth," compares actual forest growth rates to planned targets. The other performance indicator measures industry's compliance with forestry standards.

The Department also publishes a series of forest management facts and statistics on its website on a range of operational areas, including reforestation, monitoring, enforcement, harvesting and forest management. The Department has combined key reforestation information, which pertains to our recommendations, in one comprehensive report. The *Annual Status of Reforestation in Alberta* report is on the Ministry's website and will be updated annually.

The Department also generates performance reports that measure industry's compliance with regulations and standards. The Department has controls in place to ensure that reports it generates are timely, complete and accurate. Further, the Department generates reports that show industry non-compliance and follows up on these in a timely manner.

As a result, we consider this recommendation implemented.

Monitoring and enforcement—implemented

Background

In our *October 2006 Report* (no. 15, vol. 1—page 122), we recommended that the Department strengthen its monitoring of reforestation activities by:

- bringing more rigour to the review of forestry operator plans
- making its field inspection program more effective
- promptly identifying and correcting non-compliance with legislation

We followed up on this recommendation in 2009 and concluded there was satisfactory progress as of our *April 2009 Report.* The Department still needed to complete the following activities to fully implement the recommendation:

- obtain quality assurance certification over its Forest Operations Monitoring Program (FOMP) process
- ensure that all field offices were using current forms and processes
- ensure staff were clear on the minimum number of on-site performance survey inspections required
- use the penalty provisions of the *Timber Management Regulation* for inaccurate regeneration survey data

Our audit findings

We reviewed the quality assurance certification over the FOMP process, interviewed area office staff to ensure that current forms and processes were consistently used, and assessed the Department's use of penalty provisions in the *Timber Management Regulation* for inaccurate and incomplete regeneration survey data submitted by operators. Through our interviews and inspections, we were satisfied that staff understood the minimum number of on-site performance survey inspections required.

The Department uses the penalty provisions of the *Timber Management Regulation*, and publishes all enforcement actions on its website. The FOMP has provided a mechanism for the Department to promptly identify and remediate non-compliance with legislation.

The Department has developed a comprehensive system to support forest monitoring and has successfully pursued independent certification of the process and its ability to ensure quality management. This program brings consistency to the Department's operations and ensures the use of appropriate forms and inspection methods. One of the benefits of the program's certification is the focus on continual improvement.

As a result, we consider this recommendation implemented.

Executive Council—Protecting Information Assets Follow-up

Summary

The Government of Alberta uses a variety of information technology systems to provide programs and services, and to host and process personal information.[1]

In our *October 2008 Report*, we recommended that Executive Council establish a central security office to oversee information security for the organizations using the government's shared computing infrastructure. We also made seven IT security recommendations directly to Service Alberta and three recommendations jointly to Service Alberta and Infrastructure.

In 2010, we reported that Service Alberta implemented the Corporate Information Security Office, and that the CISO then developed, implemented and communicated 10 IT security directives to ministries. Service Alberta and the Ministry of Infrastructure developed and communicated physical and environmental standards for shared data facilities (SDF) that store the government's information systems and data. The ministries then started work on implementing those standards in SDFs throughout Alberta.

What we found

In our 2012 follow-up to the remaining recommendations we found that Service Alberta (see page 67):

- had fully implemented eight of the original 11 IT security recommendations
- could not fully implement the three remaining recommendations without changes to the current decentralized IT governance model, because it lacked the authority and responsibility for overseeing IT security for some government entities

Service Alberta does not have the authority or ability to monitor and enforce IT security throughout the government. Because IT security standards, monitoring and enforcement are not consistent throughout government, there is a risk that public information assets are not properly secured. As security is only as strong as its weakest link, a security issue in one government entity creates a risk to all government entities.

We conclude that IT governance could be improved and made more consistent across government, even though the current decentralized approach to IT management will make improvement challenging. We therefore make a new recommendation to Executive Council, to assess the risk to public information assets across government and to determine how best to ensure risks are properly mitigated.

Why this is important to Albertans

Albertans need to:

- access online services and accurate government information when needed
- know that the IT systems the government and publicly funded entities use are secure, and that they protect personal and government information from unauthorized use

Albertans expect government and publicly funded websites and systems used to provide programs and services to be available when needed. They expect the data they process and host to be secure from potential attack. They also expect the government will maintain adequate security standards to protect these applications and systems, and that all technologies used to deliver programs and services are implemented and maintained in a manner that safeguards confidential government and personal information.

[1] For the purpose of this recommendation, the Government of Alberta refers to all ministries, their departments, and the agencies, boards and commissions that are part of the consolidated financial reporting process for each ministry.

What needs to be done

Four years after our initial recommendation, our original findings and concerns are still applicable to the government as a whole. We expect that Executive Council, through a risk assessment, will determine how to improve corporate IT governance by setting consistent IT security requirements throughout the government and ensuring they are met, to adequately protect all public information assets.

Findings and recommendations

Assess risks and improve oversight of public information systems

Background

The Government of Alberta creates, uses and manages large volumes of sensitive and confidential information. This information is created on thousands of devices and is processed and hosted in electronic form on servers throughout the government, and at government and third-party data centres throughout the province. This data, and the devices on which it is created, processed and stored, are collectively known as "information assets."

In our *October 2008 Report* (no. 4—page 53), we recommended that Executive Council establish a central security office to oversee all aspects (develop, communicate, implement, monitor and enforce) of information security for organizations that use the government's shared information technology infrastructure.

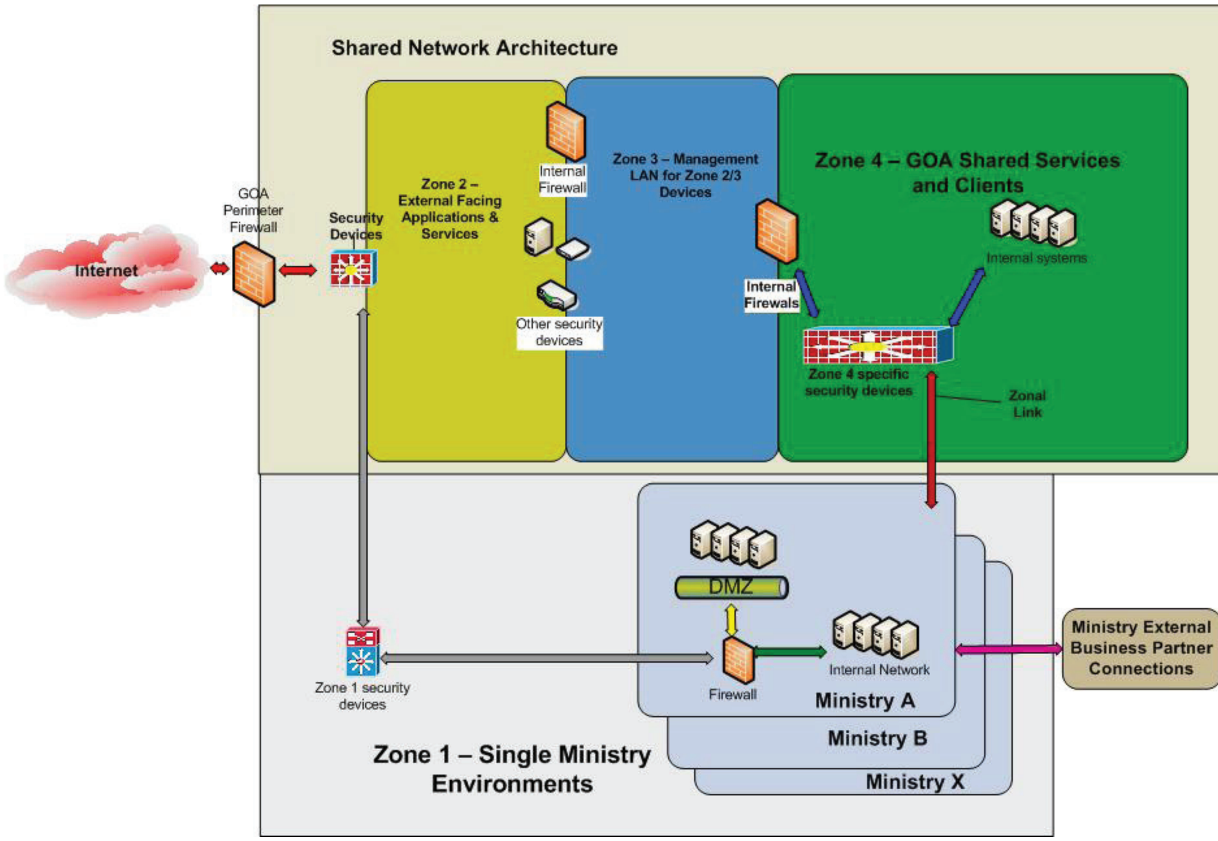
In response to our recommendation, Executive Council referred to the Information Management Technology Strategy giving Service Alberta the mandate to establish a central security office to oversee all aspects of information security for government's shared information technology infrastructure. Service Alberta subsequently created the Corporate Information Security Office and hired a director for it. In our *October 2010 Report* (page 77), we confirmed that the CISO had developed, implemented and communicated ten IT security directives, thus fulfilling the first half of the recommendation. Specifically, Service Alberta:

- developed, implemented and communicated IT security standards to government departments, through its directives
- implemented a system to prevent and monitor security issues for zones 2 to 4 of the government computing environment

However, to fully implement the remainder of our recommendation, Service Alberta would need to monitor and enforce compliance with its security directives.

The following diagram describes the government's IT security environment:

The Government of Alberta has established a zoned network architecture as a means to control security and perimeter access between the shared computing environment and departments, agencies, boards and commissions with separate networks and systems (i-domains and separate infrastructures).[2]



Internet—the internet zone includes agencies, boards and commissions that host their web applications and/or networks and data outside of the government's core computing environment.

Zone 1 includes departments and other consolidated reporting entities such as agencies, boards, commissions and Crown corporations that have chosen not to be part of the shared computing environment and instead manage their own infrastructure. There is perimeter protection from the internet in this zone, and from this zone into the other zones of the government's computing environment. These entities, though, are responsible for setting and meeting their own IT security policies, procedures and standards and are not part of the government's shared computing domain.

Zones 2 and 3 were designed to house services that have internet facing requirements. Zone 2 is partially exposed to the internet and Zone 3 contains systems that manage those services in Zone 2. This architecture provides additional layers of separation between the internet facing systems and the core government infrastructure.

2 Diagram received from Executive Council

Zone 4 includes databases, desktops and other important information assets in the government's shared computing domain.

The zone architecture is set up such that each zone has its own perimeter protection. Traffic from one zone to another zone must pass through this protection layer. These protection mechanisms include firewalls and intrusion prevention sensors.

It is possible that security breaches from the internet and zone 1 can pass through to zones 2 through 4 as normal traffic is processed over the network. The Government of Alberta shared environment has implemented perimeter protection and other protocols to mitigate the risk of external security breaches impacting sensitive core systems. However, better coordination of security protocols and reporting from entities outside of the shared environment, including those in zone 1, with the Corporate Security Office, would further enhance overall security across all zones.

During our annual audits of financial statements, we review IT controls that support financial reporting throughout government. Through these audits, we are aware that certain entities do not know of or cannot comply with Service Alberta's 10 IT security directives. Further, some entities are unsure of what IT security standards they should follow or even who is responsible for their IT security. For example, some government entities have their systems within the government computing environment (zone 1), but do not receive security services from Service Alberta. Other government entities have their information assets hosted on the internet outside of the shared computing environment on the internet, where they are subject to additional security risks. Other than our annual audits to assess IT controls that affect financial reporting, no one monitors, assesses or enforces IT security in many of these publicly funded government entities. Further, IT control assessments do not typically look at non-financial but equally important systems that host other data such as health records, driver's licences or birth certificates.

Recommendation: Assess risk and improve oversight

11 RECOMMENDATION

We recommend that Executive Council:

- assess the risks to public information assets throughout the government
- determine if the government has adequate IT security policies, standards and controls to mitigate risks
- determine who is responsible and accountable to ensure that public information assets are adequately protected. Specifically:
  - who is responsible for monitoring compliance with IT security requirements
  - who is responsible for ensuring or enforcing compliance with security requirements
  - what actions should be taken when non-compliance is identified
  - how is compliance to security requirements demonstrated

Criteria: the standards for our audit

The government should:

- know what the risks are to public information assets
- have adequate IT security policies, procedures, standards and controls to mitigate risks to public information assets

Further, the government should:

- know who is responsible and accountable for the security of public information assets in all ministries and their government entities
- be able to demonstrate that public information assets are adequately protected from unauthorized use, change, disclosure or loss

Our audit findings

Key findings

- Service Alberta developed and implemented IT security directives and then communicated them to all ministries.
- It is not clear if all ministries or government entities are following the security directives, as regular reporting from the entities is not gathered.
- The government does not have sufficient assurance mechanisms for publicly funded agencies, boards and commissions to demonstrate they adequately protect public information assets.
- More consistent corporate oversight is needed across government, to ensure public information assets are adequately protected.

We assessed the design and implementation of the IT security directives, SDF[3] standards and their respective supporting procedures and standards. We found they would be adequate to provide a minimum level of security for the government if properly implemented and consistently followed.

Service Alberta can monitor only those devices that it hosts in the shared network portion of the government network (zones 2 to 4), and does not have the authority to enforce its security standards on non-Service Alberta owned or administered devices. Ministries and other government entities also use devices in zone 1 of the government's network. A security issue in any zone opens the information assets of all ministries and all zones within the network to unnecessary security risks.

Other government entities have information assets outside of the government's computing environment. These entities may not have adequate monitoring for or protection against security issues, attacks or unauthorized access. We don't know whether their security protection is adequate because there is currently no one assessing it. Further, not all government servers that host and process important and possibly confidential or critical information are located in government SDFs. Thus, network devices and servers in about 800 locations within the computing environment that host government data are not as well protected. And other devices and servers belonging to government entities are in other locations or third-party data centres outside of the computing environment. Owners of devices and servers in locations less secure than the government's secure SDFs introduce additional risks.

In our initial recommendation to Executive Council in 2008, we found that no one single government function had the authority and responsibility to:

- design security for the government as a whole, including agencies, boards, commissions and post-secondary entities
- evaluate the effect of weak security in one part of the government and its impact on the rest
- detect attempted intrusions or respond to potential security threats across the government
- continually monitor the government for threats and vulnerabilities and develop remediation plans
- enforce the solutions required to keep the government secure

[3] Shared data facilities

Although Service Alberta developed IT security directives and standards, and is monitoring for compliance to them in zones 2 to 4 of the shared computing environment, some departments and government entities have yet to demonstrate compliance. Steps should be taken to ensure sufficient oversight so entities are not putting the government at risk.

Service Alberta provides a suite of services—shared computing infrastructure—to government organizations. Service Alberta is responsible to ensure the shared infrastructure is secure and reliable. However, under the current decentralized approach to IT governance, Service Alberta does not have the authority to ensure that organizations using the shared infrastructure meet minimum baseline security requirements within their own applications, systems and computing environments. The government uses a decentralized approach to information technology. This "federated" or "trusted" IT environment allows ministries and other government entities to join the government's computing environment quickly and share resources such as printing and email.

A decentralized, federated approach may work well for program delivery, but it poses significant challenges for IT security. The government's existing decentralized computing environment creates inherent vulnerabilities and risks to the information of government and Albertans. Information security is only as strong as the weakest link—if one part of the government doesn't have adequate security controls in place, it can affect other parts of the government that have well-designed security controls. Because information security throughout government is not consistently enforced, all public information assets may be exposed to unnecessary risks.

Audits and reporting to date have not revealed evidence of significant security breaches. However, regular and more rigorous reporting of compliance to the Government of Alberta directives by all entities and departments would provide better assurance that security breaches can be avoided or mitigated in the future.

There is a gap in the government's corporate IT governance, which results in an inability to:

- monitor for security incidents throughout all government ministries—including the departments and publicly funded agencies, boards and commissions that are a part of their consolidated financial reporting process
- ensure all government entities meet and follow adequate IT security standards to protect public information assets
- take appropriate action when IT security standards are not being followed

Events subsequent to the audit

Executive Council has recently formed the Deputy Minister Information Management and Technology Committee to provide a cross-government venue for the review and approval of strategies and policies of government IT management and technology services. Included in the Committee's mandate is the oversight of systems and processes in place to address IT security. We will follow up on the work of this committee in due course.

Implications and risks if recommendation not implemented

Without adequate security policies, the ability to monitor and enforce them throughout government, or the need for government entities to demonstrate they adequately protect public information assets, government information and the personal information of Albertans is at risk of unauthorized use or disclosure.

Service Alberta—Protecting Information Assets Follow-up

Summary

The Government of Alberta uses a variety of information technology systems to provide programs and services, and host and process personal information.

We audited the security of the government and made 11 recommendations to the ministries of Executive Council, Service Alberta and Infrastructure in our *October 2008 Report,* in three areas of IT security:

- secure development, operation and use of web applications
- security of wireless access to systems
- physical security and environmental protection of data in data facilities

In our *October 2010 Report,* we found that Service Alberta had implemented two of our IT security recommendations and was working on the other nine.

What we examined

We assessed the work Service Alberta did to develop, implement, communicate and monitor the 10 IT security directives. We also examined the policies, procedures and other completed and ongoing work to communicate and operationalize these directives.

What we found

We followed up on these recommendations in 2012 and found that Service Alberta had implemented eight of the original 11 IT security recommendations. We also found that Service Alberta cannot fully implement the three remaining recommendations because it lacks the authority and responsibility for overseeing IT security for certain government entities. Therefore, we stopped our audit of Service Alberta's implementation of those recommendations.

Instead, we make a new recommendation that the Government of Alberta's Executive Council (see page 62) to:

- assess the risks to public information assets throughout the government
- determine if the government has adequate IT security policies, standards and controls to mitigate risks
- determine who is responsible and accountable to ensure that public information assets are adequately protected

Why this is important to Albertans

Albertans need to be able to access online programs and services, and obtain accurate information when needed. Albertans also need to know that the IT systems the government and publicly funded entities use are secure and available when needed and that they protect personal and government information from unauthorized use.

Findings and recommendations

Central security office—changed circumstances

Background

In our *October 2008 Report* (page 53), we recommended that Executive Council immediately establish a central security office to oversee (develop, communicate, implement, monitor and enforce) all aspects of information security for organizations using the government's shared information technology infrastructure.

Our audit findings

Executive Council, in response to our recommendation, stated Service Alberta has the mandate to establish a central security office to oversee all aspects of infornation security for the government's shared technology infrastructure.

The Corporate Information Security Office developed and communicated 10 Information security management directives. These 10 directives were approved by the Corporate Chief Information Officer on February 5, 2010. We found that the 10 directives were based on internationally recognized standards that would reasonably protect government information assets if properly implemented and consistently followed.

However, we were unable to obtain sufficient evidence that:

- departments followed the security directives
- someone is responsible and accountable to monitor and ensure that the security directives are followed throughout government

Service Alberta considers this recommendation implemented. We found that Service Alberta did everything it believed it had the ability and authority to do. We will no longer assess Service Alberta's implementation of this recommendation. We make a new recommendation to the Government of Alberta's Executive Council (see page 62) to assess the risk to public information assets throughout the government in lieu of Service Alberta being able to set standards or monitor for compliance.

Develop and maintain detailed policies and standards to build and operate secure web applications—implemented

Background

Service Alberta implemented this recommendation in 2010 and we reported this as implemented in our *October 2010 Report* (page 78).

Our audit findings

Service Alberta implemented this by working with all ministries through the CIO Council to develop, implement and communicate its 10 IT security directives.

Develop standards and policies to ensure web applications are built to required standards (repeated in 2010)—changed circumstances

Background

We previously recommended that Service Alberta, in conjunction with all ministries and through the CIO Council, develop and implement well-designed and effective controls to ensure all Government of Alberta web applications consistently meet all security standards and requirements (*October 2008 Report,* no. 5—page 66).

Our audit findings

We obtained and reviewed the documentation and the process Service Alberta used to develop, implement and communicate IT security standards.

However, Service Alberta does not have the ability or authority to implement controls to monitor and enforce those security standards on Government of Alberta web applications. Therefore, the final part of the recommendation, to ensure those standards are consistently met throughout government, is not being done. Although certain departments have a process to comply with the security standards, the government as a whole does not know if all web applications that process and host government information and that of Albertans' are secured.

We will no longer assess Service Alberta's implementation of this recommendation. We make a new recommendation to the Government of Alberta's Executive Council (see page 62) to assess the risk to government information assets of Service Alberta being unable to fully implement it.

Review and improve the Government of Alberta's shared computing infrastructure policies, procedures and standards—changed circumstances

Background

We previously recommended that Service Alberta work with all ministries and through the CIO Council, to develop and implement security policies, procedures, standards and well-designed control activities for the Government of Alberta's shared computing network (*October 2008 Report,* page 68).

Our audit findings

We obtained and reviewed the documentation and process Service Alberta used to develop, implement and communicate IT security standards.

However, Service Alberta also told us that it does not have the ability or authority to implement controls to monitor and enforce those security standards. We confirmed that Service Alberta implemented a system and process to monitor for security issues and vulnerabilities where it can, and informs the owners when security issues are identified. However, Service Alberta cannot take further action on security issues when those resources are not under its direct control.

Therefore, the final part of the recommendation, to ensure those standards are consistently met, is not being done. Although departments work with Service Alberta to remediate security issues in zones 2 to 4 (see diagram—page 61), Service Alberta does not have the authority to ensure that departments remediate the security issues promptly. Further, as Service Alberta has even less control over devices in zone 1, there is less ability for Service Alberta to monitor systems and notify their owners of security issues.

We will no longer assess Service Alberta's implementation of this recommendation. We make a new recommendation to the Government of Alberta's Executive Council (see page 62) to assess the risk to public information assets throughout the government.

Wireless policies and standards—implemented

Background

In our *October 2008 Report* (page 75), we recommended that Service Alberta, in conjunction with all ministries and through the CIO Council, update its existing wireless local area network access security policy to improve the guidance to departments for deploying and securing wireless network access points.

Our audit findings

Service Alberta implemented this recommendation by developing and implementing two security directives that provide standards and guidance to departments to deploy and secure wireless network access points.

Device configurations—implemented

Background

In our *October 2008 Report* (page 76), we recommended that Service Alberta, in conjunction with all ministries and through the CIO Council, review the configuration of laptops, and approve policies to prevent laptops from inadvertently exposing the government's computer environment to security risks.

Our audit findings

Service Alberta implemented this recommendation by developing and implementing a security directive requiring departments to implement appropriate controls to mitigate security risks associated with the use of portable computing devices such as laptops or personal digital assistants.

Further, through its service provider, Service Alberta implemented standards for security and encryption that are mandatory on laptops issued through its central services.

Ongoing monitoring and surveillance—implemented

Background

In our *October 2008 Report* (no. 7—page 77), we recommended that Service Alberta, in conjunction with all ministries and through the CIO Council, update network surveillance methods to detect and investigate the presence of unauthorized wireless access points within the Government of Alberta.

Our audit findings

Service Alberta implemented technical systems and associated processes to monitor for security issues at the perimeter and throughout the government's shared computing environment. Service Alberta also developed standards and procedures to look for and assess risks to the government through wireless access points. Service Alberta then conducted a security assessment on selected departments and did not find any significant issues.

Physical and environmental security recommendations

The next three recommendations are similar in nature. We relied on the same or similar documentation and evidence to confirm that they were implemented. Therefore, we document the individual recommendations and afterwards the combined audit findings we used for all three.

Backup power supplies—implemented

Background

In our *October 2008 Report,* (page 85), we recommended that Service Alberta, work in conjunction with all ministries and through the CIO Council, to ensure that ministries that use data facilities ensure that connected computer equipment has a sufficient redundant power supply.

Physical security—implemented

Background

In our *October 2008 Report* (page 87), we recommended that Service Alberta work with the Ministry of Infrastructure and in conjunction with all ministries and through the CIO Council, to improve:

- physical security controls at data facilities
- logging of access to data facilities by implementing effective controls to track access

Environmental security—implemented

Background

In our *October 2008 Report* (page 89), we recommended that Service Alberta work with ministries to improve the environmental security controls at shared data facilities.

Our combined audit findings for the physical and environmental security recommendations

Service Alberta and the Ministry of Infrastructure developed and implemented physical and environmental standards through a security directive and standards for Alberta's shared data facilities (SDF). They also developed and implemented additional policies, procedures and standards to support the two main documents.

In 2010, we obtained and reviewed the gap analysis of physical and environmental security needs for server rooms. We also reviewed the plan—based on the risk to the systems and available resources to remediate those security gaps. In 2012, we found that the high-risk gaps identified in 2010 for SDFs are now remediated. We also obtained evidence that Service Alberta is monitoring compliance with the security standards in the SDFs and works with Infrastructure to remediate issues when they are identified through ongoing monitoring or annual self-audits.

Although sufficient work was completed to find this recommendation implemented, we will continue to follow up on Service Alberta and Infrastructure's work to remediate lower risk issues in SDFs and in other locations around Alberta that host government servers and network computing devices.

Web Application Vulnerability Assessments

What we did

We used a proven automated tool to scan government owned, internet facing websites (web applications) for vulnerabilities. We reviewed the results from the tool and eliminated as many false positives as possible to provide application owners with valuable results so that they could focus their efforts on correcting vulnerabilities. We reported our findings to application owners, who in some cases had already remediated the vulnerabilities we found. Once the web application owners remediated the vulnerabilities, we rescanned the websites to confirm the vulnerabilities no longer existed.

Why we did this work

Web applications are a common way organizations share information or provide services to the public. For example, the Government of Alberta uses web applications to inform the public about health issues, register vehicles or reserve campsites. Web applications rely on the internet, which means they are accessible by everyone, anywhere in the world. Most people who use a web application do so for legitimate purposes. As with all computer systems, web applications have weaknesses that can be exploited to compromise the security of information or subvert the system to make it do things the developers did not intend.

It is the nature of modern technology that all systems on a network are connected. There are controls in place to limit some of those connections. But hackers take advantage of that inherent interconnectedness and will attack an easy target first and use that to get access to more valuable, and highly secured, targets. Web applications with weak security are easy targets. Therefore, it is important to secure all web applications, not just ones that can be used to access personal information. Even for a simple web application with no personal information, weaknesses in the system could be abused to gain a toe-hold and then gain access to other, more sensitive systems.

For example, one type of vulnerability allows an attacker to trick a user into entering data into a form on a web page, in such a way that an attacker can inject special code into the web application and cause it to behave in a way not intended by the developer. Using this method, the attacker could steal information entered by the user, such as usernames and passwords. The attacker would then use those credentials to try and exploit other vulnerabilities to gain greater privileges, install software and begin attacking other systems.

What we found

We are not publicly reporting details of the vulnerablilities we found and reported to management because public disclosure would increase the risk to the organizations we audited.

We found fewer vulnerabilities than during our audit in 2008, but we found that the government, which includes departments, agencies, boards, commissions and post-secondary institutions, has not consistently applied a process to regularly review the security of web applications. Some organizations have a process to regularly review the security of their web applications, and we found fewer vulnerabilities in the web applications belonging to those organizations. Also, they more promptly remediated the vulnerabilities we did find.

At the organizations that did not have a process to regularly review web applications for security, we found web applications with multiple critical vulnerabilities. These vulnerabilities were well known vulnerabilities, which the organization should have detected and corrected prior to our audit.

Human Services—Tuition-based Training to Learners Follow-up

Summary

In 2008, we audited the former Department of Employment and Immigration's systems for delivering training to Albertans who need to improve their employment skills. We made three recommendations in our *October 2008 Report* (pages 243–253). This year, we conducted follow-up work to assess the Department's progress in implementing the three recommendations.

The Department of Human Services has implemented two of our recommendations.

To fully implement the outstanding recommendation, the Department must:

- finish developing outcome and indicator reports, and use these reports to monitor whether training providers meet performance outcomes and expectations
- implement the monitoring policy, by monitoring and reviewing post-audit action plans that the training providers prepare

Findings and recommendations

Approving and renewing training programs—implemented

Background

In our *October 2008 Report* (page 249), we recommended that the Department improve its systems for approving and renewing programs by:

- developing clear performance expectations for each program and training provider
- clearly defining its criteria for approving each program
- using its monitoring results to decide whether to renew a program

Our audit findings

In implementing this recommendation, the Department:

- developed and communicated performance targets that require 70 per cent of learners to be employed or to have advanced to further training within six months of completing the program
- developed a policy that states training providers' obligations and the Department's expectations
- revised its program approval policy to clearly define the roles and responsibilities of training providers, as well as describe the processes, criteria and conditions upon which the Department will approve and renew programs

We reviewed the programs approval process and did not find any instances where programs were approved or renewed without following the policy.

Improve the use of information systems—implemented

Background

In our *October 2008 Report* (page 251), we recommended that the Department improve its use of information systems by:

- integrating its payment processing system with other learner databases, to ensure that tuition fee payments are accurate
- implementing adequate controls to ensure all key learner data is promptly updated in the system
- using exception reports to detect potential non-compliance problems

Our audit findings

The Department implemented this recommendation by:

- implementing MOBIUS, a management information system that integrates payment processing with databases for learners and tuition fees, and automatically calculates tuition fee payments
- developing manual and automated controls to safeguard the integrity of data in MOBIUS, thereby ensuring that tuition fee payments are accurate
- designing and using error reports to identify, analyze and correct any data entry and processing errors

Monitoring and enforcement of training providers—satisfactory progress

Background

In our *October 2008 Report* (no. 24—page 245), we recommended that the Department improve its monitoring of tuition-based training providers by:

- quantifying tuition refunds that training providers owe the Department
- implementing policies and procedures that outline steps and timelines for dealing with non-compliance problems
- assessing whether training providers were meeting the Department's performance expectations

Our audit findings

The Department has made progress by implementing an information system. MOBIUS automatically calculates tuition refunds based on withdrawal dates the training provider enters into the system.

The Department also issued a monitoring, auditing and remedial action policy that requires:

- the internal audit unit to assess the training providers' compliance with policies and regulations
- training providers to prepare post-audit action plans to deal with non-compliance issues
- regional offices to monitor the training providers' implementation of the post-audit action plans
- the internal audit unit, regional representatives and delivery partnerships unit to review results, at the end of the monitoring period, to ensure that post-audit action plans are implemented

By the time we had completed our work, the Department had started receiving post-audit action plans from training providers.

While the Department has established and communicated performance outcomes for training providers, we noted that it had not fully developed reports to compare actual performance to expected outcomes. Without these reports, the Department cannot effectively assess and monitor whether training providers are meeting its outcomes.

AUDITOR GENERAL
Alberta

Financial Statements and Performance Measures Auditing

Report of the Auditor General of Alberta—October 2012

Financial Statements and Performance Measures

Independence and Audit Quality

Our independence from those that we audit is required to ensure that our work is objective—based on facts and executed without preconceived opinion. The independence requirement is realized through appointment of the Auditor General by the Legislative Assembly, and our liaison with the Assembly through the Standing Committee on Legislative Offices. A primary element of the relationship is the Assembly's prerogative to authorize financing of the Office's operations.

Our business practices are designed to ensure that our staff remain free of any association that could potentially impair their objectivity.

The Office has in place systems to ensure that we perform quality audits. Quality audits are relevant, reliable and done at a reasonable cost. As stated in our *2012–2015 Business Plan,* we will commission an independent peer review of our Office systems. The review will provide objective conclusions on whether we do relevant, reliable work at a reasonable cost.

Financial Statements

The Government of Alberta prepares and makes public financial statements to provide information to Albertans about the province's financial performance. The Auditor General, under the *Auditor General Act,* audits the financial statements of the Province of Alberta, as well as every ministry, department, regulated fund and provincial agency.

An audit is the collection and evaluation of evidence about the fairness of financial statements. By obtaining this evidence, the Auditor General is able to provide a high level of assurance to Albertans about whether the financial statements prepared by management are fairly presented and free from material misstatements. An audit includes assessing where errors (misstatements) could occur in the financial statements, testing management's internal control over financial information and performing additional audit procedures.

The audit, and the auditor's report, adds credibility to the financial statements by telling Albertans whether the financial statements are reasonable. This does not mean that the Auditor General examines every transaction, or guarantees that the financial statements are error-free. Millions of transactions are summarized into the Province's financial statements. Audits, therefore, necessarily focus on areas of risk and on the places where errors that matter to users' understanding of the financial statements as a whole are likely to occur.

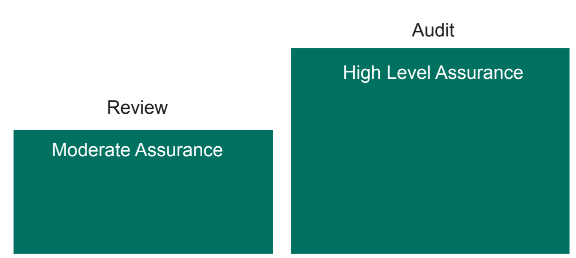
Performance Measures

The Government of Alberta prepares and reports performance measures to provide information that allows Albertans to assess the government's overall performance, including performance relative towards goals in specific policy areas.

The Auditor General reviews ministry performance measures. In addition, the Auditor General audits the performance measures in *Measuring Up. Measuring Up* reports progress on strategies and performance measures in the *Government of Alberta Strategic Business Plan.* These reviews and audit add credibility to the government's performance reports.

Management determines which measures will be reported and requests the Auditor General to review or audit particular measures. These reviews and audits are not required under the *Auditor General Act.* However, they add credibility to public reporting by examining the reliability, understandability, comparability and completeness of performance measures.

Audits are designed to provide a higher level of assurance than reviews. Reviews consist primarily of evidence collected via inquiries and analysis. Audits include these procedures as well as additional techniques to collect evidence, such as testing of internal control, confirmation, inspection, observation and recalculation. Because more evidence is collected, using different types of techniques, audits provide relatively more assurance than reviews that the information is correct.



Levels of Credibility

Cost of our work on financial statements and performance measures

It requires significant effort for the Office of the Auditor General to complete its audits and reviews of financial statements, *Measuring Up* and performance measures. In total, this work (which excludes our system audit work) took over 154,000 hours, at a full cost of $19.1 million, including $4 million (29,000 hours) paid to contracted services. This work resulted in the audit and review reports indicated in the tables that follow.
It also resulted in various recommendations to management to improve systems and processes.

In carrying out the work of the Office, we received all the information, reports and explanations that we required.

On May 8, 2012, the government announced new ministry structures. Since the 2011–2012 fiscal year was completed prior to this announcement, the ministry structure in this section is based on what was in existence at March 31, 2012.

Financial Statements

We issued an unqualified independent auditor's report on the financial statements for the year ended March 31, 2012 (unless otherwise stated) for the following entities:

Consolidated Financial Statements of the Province of Alberta

Advanced Education and Technology

- Ministry of Advanced Education and Technology
- Department of Advanced Education and Technology
- Access to the Future Fund
- Alberta Enterprise Corporation
- Alberta Foundation for Health Research
- Alberta Innovates—Bio Solutions
- Alberta Innovates—Energy and Environment Solutions
- Alberta Innovates—Health Solutions
- Alberta Innovates—Technology Futures
- Athabasca University
- University of Alberta
- University of Calgary
- University of Lethbridge

For the year ended June 30, 2011

- Alberta College of Art and Design
- Bow Valley College
- Grande Prairie Regional College
- Grant MacEwan University
- Grant MacEwan University Foundation
- Keyano College
- Lakeland College
- Lethbridge College
- Medicine Hat College
- Mount Royal University
- NorQuest College
- Northern Alberta Institute of Technology
- Northern Alberta Institute of Technology Foundation
- Northern Lakes College*
- Olds College
- Portage College
- Red Deer College
- Southern Alberta Institute of Technology

Agriculture and Rural Development

- Ministry of Agriculture and Rural Development
- Department of Agriculture and Rural Development
- Agriculture Financial Services Corporation
- Alberta Livestock and Meat Agency Ltd.

Culture and Community Services

- Ministry of Culture and Community Services
- Department of Culture and Community Services
- Alberta Foundation for the Arts
- Historic Resources Fund
- The Alberta Historical Resources Foundation
- The Government House Foundation
- The Wild Rose Foundation

Education

- Ministry of Education
- Department of Education
- Alberta School Foundation Fund

* We have not issued reports for the years ended June 30, 2010 and 2011.

We issued an unqualified independent auditor's report on the financial statements for the year ended March 31, 2012 (unless otherwise stated) for the following entities:

For the year ended August 31, 2011

- Alberta Teachers' Retirement Fund Board
- Northland School Division No. 61

Energy

- Ministry of Energy
- Department of Energy
- Alberta Utilities Commission
- Energy Resources Conservation Board
- Post-Closure Stewardship Fund

For the year ended December 31, 2011

- Alberta Petroleum Marketing Commission

Environment and Water

- Ministry of Environment and Water
- Department of Environment and Water
- Climate Change and Emissions Management Fund

Executive Council

- Ministry of Executive Council

Finance

- Ministry of Finance
- Department of Finance
- Alberta Cancer Prevention Legacy Fund
- Alberta Gaming and Liquor Commission
- Alberta Gambling Research Institute
- Alberta Heritage Foundation for Medical Research Endowment Fund
- Alberta Heritage Savings Trust Fund
- Alberta Heritage Scholarship Fund
- Alberta Heritage Science and Engineering Research Endowment Fund
- Alberta Investment Management Corporation
- Alberta Lottery Fund
- Alberta Risk Management Fund
- Alberta Securities Commission
- ATB Financial
  - ATB Insurance Advisors Inc.
  - ATB Investment Management Inc.
  - ATB Securities Inc.
- Consolidated Cash Investment Trust Fund
- N.A. Properties (1994) Ltd.
- Provincial Judges and Masters in Chambers (Registered) Pension Plan
- Provincial Judges and Masters in Chambers Reserve Fund
- Supplementary Retirement Plan Reserve Fund

For the year ended September 30, 2011

- Gainers Inc.

For the year ended December 31, 2011

- Alberta Capital Finance Authority
- Alberta Local Authorities Pension Plan Corp.
- Alberta Pensions Services Corporation
- Credit Union Deposit Guarantee Corporation
- Local Authorities Pension Plan
- Management Employees Pension Plan
- Public Service Management (Closed Membership) Pension Plan
- Public Service Pension Plan
- Special Forces Pension Plan
- Supplementary Retirement Plan for Public Service Managers

We issued an unqualified independent auditor's report on the financial statements for the year ended March 31, 2012 (unless otherwise stated) for the following entities:

Health and Wellness

- Ministry of Health and Wellness
- Department of Health and Wellness
- Alberta Health Services
- Calgary Laboratory Services Ltd.
- Capital Care Group Inc.
- Carewest
- Health Quality Council of Alberta

Human Services

- Ministry of Human Services
- Department of Human Services
- Calgary and Area Child and Family Services Authority
- Central Alberta Child and Family Services Authority
- East Central Alberta Child and Family Services Authority
- Edmonton and Area Child and Family Services Authority
- Métis Settlements Child and Family Services Authority
- North Central Child and Family Services Authority
- Northeast Alberta Child and Family Services Authority
- Northwest Alberta Child and Family Services Authority
- Southeast Alberta Child and Family Services Authority
- Southwest Alberta Child and Family Services Authority

For the year ended December 31, 2011

- Workers' Compensation Board–Alberta

Infrastructure

- Ministry of Infrastructure

Intergovernmental, International and Aboriginal Relations

- Ministry of Intergovernmental, International and Aboriginal Relations

Justice

- Ministry of Justice
- Department of Justice
- Human Rights Education and Multiculturalism Fund
- Office of the Public Trustee, Estates and Trusts[1]

Legislative Assembly

- Legislative Assembly Office
- Office of the Chief Electoral Officer
- Office of the Ethics Commissioner
- Office of the Information and Privacy Commissioner
- Office of the Ombudsman

[1] Our auditor's opinion on the financial statements of the Office of the Public Trustee, Estates and Trusts for the year ended March 31, 2012 is unqualified. Our opinion includes an additional paragraph highlighting that the financial statements were prepared under a framework using the basis of accounting described in a note to the financial statements. We concluded that the financial statements were prepared to comply with the provisions of the *Public Trustee Act* and may not be suitable for another purpose.

Financial Statements and Performance Measures

We issued an unqualified independent auditor's report on the financial statements for the year ended March 31, 2012 (unless otherwise stated) for the following entities:

Municipal Affairs

- Ministry of Municipal Affairs
- Department of Municipal Affairs
- Alberta Social Housing Corporation

For the year ended December 31, 2011

- Improvement Districts 4, 9, 12, 13 and 24
- Kananaskis Improvement District
- Special Areas Trust Account

Seniors

- Ministry of Seniors
- Department of Seniors
- Persons with Developmental Disabilities Calgary Region Community Board
- Persons with Developmental Disabilities Central Region Community Board
- Persons with Developmental Disabilities Edmonton Region Community Board
- Persons with Developmental Disabilities Northwest Region Community Board
- Persons with Developmental Disabilities Northeast Region Community Board
- Persons with Developmental Disabilities South Region Community Board

Service Alberta

- Ministry of Service Alberta

Solicitor General and Public Security

- Ministry of Solicitor General and Public Security
- Department of Solicitor General and Public Security
- Victims of Crime Fund

Sustainable Resource Development

- Ministry of Sustainable Resource Development
- Department of Sustainable Resource Development
- Natural Resources Conservation Board
- Environment Protection and Enhancement Fund
- Land Stewardship Fund

Tourism, Parks and Recreation

- Ministry of Tourism, Parks and Recreation
- Department of Tourism, Parks and Recreation
- Alberta Sport, Recreation, Parks and Wildlife Foundation
- Travel Alberta

Transportation

- Ministry of Transportation

Treasury Board and Enterprise

- Ministry of Treasury Board and Enterprise
- Long Term Disability Income Continuance Plan—Management, Opted Out and Excluded
- Long Term Disability Income Continuance Plan—Bargaining Unit

We issued an unqualified independent auditor's report on the financial statements for the year ended March 31, 2012 (unless otherwise stated) for the following entities:

For the year ended December 31, 2011

- Government Employees' Group Extended Medical Benefits Plan and Prescription Drug Plan Trust
- Government of Alberta Dental Plan Trust

We are satisfied that the transactions and activities we examined in financial statement audits complied with relevant legislative requirements. As auditors, we test only some transactions and activities, so we caution readers that it would be inappropriate to conclude that our testing would identify all transactions and activities that do not comply with the law.

Performance Measures

Measuring Up **(audit report on performance measures)**

The following ministries and organizations engaged us to review selected performance measures in their 2011–2012 annual reports. We issued unqualified review engagement reports on the measures reviewed:

Advanced Education and Technology
Agriculture and Rural Development
Culture and Community Services
Education
Energy
Environment and Water
Executive Council
Finance
  Alberta Pensions Services Corporation
Health and Wellness
Human Services
  Workers' Compensation Board–Alberta
Infrastructure
Intergovernmental, International and Aboriginal Relations
Justice
Municipal Affairs
Seniors
Service Alberta
Solicitor General and Public Security
Sustainable Resource Development
Tourism, Parks and Recreation
Treasury Board and Enterprise

Each ministry is responsible for publicly reported measures included in the results analysis section of its annual report. Processes at each ministry should support each publicly reported performance measure. Ministry management annually selects some of these measures for the Auditor General to review. A review is not an audit, and provides a limited/moderate level of assurance.

We reviewed 50 performance measures from 20 annual reports released in the period ending June 2012.[2] Unqualified review reports were issued for each ministry annual report listed above.

[2] Including the November 2011 Ministry of Education annual report update.

Agricultural and Rural Development

Summary

Department

The Department of Agriculture and Rural Development should improve its risk management processes—see next column.

The Department of Agriculture and Rural Development has implemented our October 2001 recommendation to evaluate the success of its grant programs in meeting Ministry goals—see page 86.

Agriculture Financial Services Corporation

Agriculture Financial Services Corporation has:

- implemented our November 2011 recommendation to ensure its key lending controls operate as designed by testing them and demonstrating they are functioning—see page 87
- implemented our October 2010 recommendation to improve its processes for conducting compliance audits and investigations—see page 87
- implemented our October 2009 recommendation to design and implement integrated business and IT risk assessment and IT control frameworks—see page 88

Alberta Livestock and Meat Agency Ltd.

Alberta Livestock and Meat Agency Ltd. has:

- implemented our November 2011 recommendation to improve its risk management processes—see page 89
- implemented our November 2011 recommendation to ensure compliance with its contracting procedures—see page 89

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from the current audit

Enterprise risk management

Background

Enterprise risk management is a continuous, proactive process to understand, manage and communicate risk from an organization-wide perspective. Risk management involves assessing the risk of uncertain outcomes, ranking them based on likelihood and potential impact to the organization, and then implementing appropriate responses to mitigate significant identified risks.

A risk assessment should consider industry and regulatory factors, applicable laws and regulations, economic indicators, industry trends, business relationships and fraud and error.

Recommendation: Enterprise risk management

12 RECOMMENDATION

We recommend that the Department of Agriculture and Rural Development improve its risk management processes.

Criteria: the standards for our audit

A formal risk assessment should be documented and updated regularly.

Effective risk management should include:
- clearly defining roles and responsibilities for risk management
- identifying and documenting the risks associated with achieving the entity's objectives
- assessing and ranking risks, including the likelihood and potential impact of specified risks
- developing and implementing programs or procedures to mitigate risks
- updating risk assessment as changes occur
- monitoring and evaluating risks and the steps take to mitigate them
- reporting the risks and actions to senior management

Our audit findings

Key findings

The Department is developing a formal risk management framework to replace its current informal process.

We observed the Department's process to identify and report on risks has been informal, as risks become apparent or as needs arise.

While the Department has various processes to address risks, risk management is more effective if completed in one cohesive process. This would allow senior management to better rank responses to risks and see the interrelationships among risks.

Management is developing a formal framework to better indentify and manage risk at a divisional, sector and executive team level. This framework will consider the principles and guidelines in ISO 31000 *Risk Management,* which is used for similar risk assessment processes elsewhere in government.

A more comprehensive, formal risk management process will help the Department determine if it has adequate controls and processes to mitigate risk.

Implications and risks if recommendation not implemented

Without a formal process to identify and manage risk, the Department may not mitigate all significant risks and may focus resources on less significant issues.

Matters from prior-year audits

Grant programs—implemented

Background

The Department has implemented our *October 2001 Report* (no. 3—page 50) recommendation to evaluate the success of its grant programs in meeting Ministry goals.

Our audit findings

In our *October 2009 Report* (page 165), we noted the Department had implemented parts of the recommendation related to post-completion evaluations for individual grants awarded and monitoring of program outcomes for individual's grants.

In our *November 2011 Report* (page 74), we noted the Department developed a grant management system, formalized a plan to periodically review the grant programs and assess them against the Department's strategic objectives, and developed a new reporting framework to link quantifiable performance measures and targets to grant programs.

In 2012, the Department:

- applied the framework to the Growing Forward Grant Program Evaluation Project and Irrigation Rehabilitation Program—This demonstrated the effectiveness of the framework to link performance measures and targets to grant programs.
- initiated a program and project development plan for the upcoming Growing Forward 2 program, using the results of the Growing Forward Evaluation Project—The plan will develop quantifiable performance measures and targets to be applied at the outset of the new grant program. Completion of the establishment of quantifiable performance measures and targets is expected by August 2012.
- proposed to evaluate all the Department's pre-existing grant programs using the framework within a reasonable period

The Department has demonstrated the implementation of a grant framework which addresses the entire grant cycle through the application on two existing programs as well as on the development of performance indicators for the Growing Forward 2 agreement.

Agriculture Financial Services Corporation

Matters from the current audit

There are no new recommendations.

Matters from prior-year audits

Lending controls—implemented

Background

Agriculture Financial Services Corporation (AFSC) has implemented our *November 2011 Report* (no. 8—page 74) recommendation to ensure its key lending controls operate as designed by testing them and demonstrating they are functioning.

Our audit findings

We tested a sample of newly approved loans, which included farm and commercial loans from throughout the province. AFSC's application of key lending controls on loan disbursements, file administration or loan file reviews was operating effectively. We found that loan offer letters were appropriately documented and signed before AFSC disbursed any funds. AFSC also completed an independent review of loan applications to ensure compliance with loan eligibility, policy and procedures.

Cross compliance review—implemented

AFSC has implemented our October 2010 Report (no. 12—page 124) recommendation to improve its processes for conducting compliance audits and investigations by:

- clearly defining the roles and responsibilities of the Program Cross Compliance and Investigations (PCCI) group
- improving the coordination between PCCI and program areas

Our audit findings

In 2011, AFSC developed several policies to establish a framework for conducting compliance audits and investigations. In 2012, we tested the operating effectiveness of these policies and noted the PCCI group:

- developed and consistently applied specific risk assessment criteria to determine whether an investigation was warranted. If a preliminary review identifies issues, AFSC places a hold on all program claims across all business lines, until the investigation is completed.
- summarizes the results and reason for the investigation, work performed, primary file issues and indentified overpayments. The summary also identifies internal control weaknesses and recommendations to improve program areas.
- met regularly with program management staff and internal legal counsel to report and discuss findings and appropriate courses of action. This has resulted in better coordination and sharing of information between program areas in AFSC.
- submit monthly and year-end reports to the Vice-President, Risk Management Services. The reports highlight the status of examinations and investigations that PCCI conducted as well as issues that remain unresolved.

IT risk assessment and control framework—implemented

Background

AFSC has implemented our *October 2009 Report* (page 168) recommendation to design and implement an:

- integrated business and IT risk assessment framework to identify and assess IT risks to the corporation
- IT control framework with defined controls to mitigate the identified IT risks

Our audit findings

In 2012, AFSC continued to improve its practices to manage risks in its IT environment. AFSC has updated its IT risks to align with its enterprise business risks, and has documented them in a risk register. Risks are ranked by likelihood and business impact and assigned a criticality level (high, medium, low).

AFSC has also developed an IT control framework to mitigate identified IT risks. The IT control framework is based on internationally recognized IT security and control standards that include ISO 27002 and COBIT. The framework covers critical IT control areas such as governance, IT security, change management and access management.

Alberta Livestock and Meat Agency Ltd.

Matters from prior-year audits

Risk management processes—implemented

The Alberta Livestock and Meat Agency Ltd. has implemented our *November 2011 Report* (no. 10—page 78) recommendation to improve its risk management processes.

Our audit findings

We observed that the Agency has developed a comprehensive enterprise risk management process that assesses the risk of uncertain outcomes, ranks them based on likelihood and potential impact to the organization, and develops responses to mitigate significant identified risks. The risk assessment considered industry and regulatory factors, environmental laws and regulations, economic indicators, industry trends, business relationships, fraud and error, and was reviewed and updated quarterly to ensure current risks were prioritized.

Signing of service contracts—implemented

The Agency has implemented our *November 2011 Report* (no. 11—page 79) recommendation to ensure compliance with its contracting procedures.

Our audit findings

We observed, on a sample of contracts, that the appropriate expenditure officer and contractor signed service contracts before work began, in accordance with the Agency's purchasing policies. This ensured that the Agency and the contractor agreed to the terms and conditions of the services the contractor would provide, before the work began.

Education

Summary

Department

The Department of Education has implemented our October 2007 recommendation to establish a policy for developing business cases.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from prior-year audits

Policy for developing business cases—implemented

Our audit findings

The Department implemented our *October 2007 Public Report* (vol. 2—page 45) recommendation to establish a policy for developing business cases. During the 2011 fiscal year, the Department decided not to adopt the Resource Investment Decision Request (RIDeR) in its current form. The RIDeR is the Department's internal and generic business case template.

However, in February 2012, the Department decided to maintain the availability of the RIDeR template and guidelines and management provided the following guidance to staff with respect to conditions for using the template:

- upon undertaking a preliminary analysis for any significant initiative or an initiative that requires new funding exceeding $1 million or a reallocation of resources exceeding $1 million, the manager responsible is required to review the criteria for completion of the RIDeR contained in the RIDeR template and guidelines
- the manager uses this review to determine whether to prepare a formal RIDeR document or a more robust, in-depth business case analysis
- senior management must validate any decision not to complete a formal RIDeR
- the manager submits the RIDeR or business case analysis to senior management for approval

In addition, the RIDeR guidelines encourage users to identify the project alternatives, potential impacts, risks, and other factors that must be assessed and documented.

Review of school jurisdiction audited financial statements and management letters

Background

In accordance with Section 19(4) of the *Auditor General Act,* we report on our review of school jurisdiction audited financial statements and management letters.

We audited one of the school jurisdictions (Northland). For all other school jurisdictions, we reviewed the management letters of their auditors. Those audits were not designed to assess all key systems of control and accountability. However, the auditors do report to management about weaknesses that come to their attention when auditing the financial statements. We also reviewed the auditors' reports on the financial statements.

There are 77 school jurisdictions, comprising 64 school boards and 13 charter schools.

Our audit findings

Under Section 151 of the *School Act,* school jurisdiction auditors must send management letters, auditor's reports and audited financial statements to the Minister by November 30 of each year.

Auditors' Reports—Of the 77 school jurisdictions, four school jurisdictions (Almadina School Society, Calgary Arts Academy Society, Calgary Girls' School Society and The Greater Southern Separate Catholic Francophone Education Region No. 4) received a qualified auditor's report for the year ended August 31, 2011. Three of the reports were qualified because the auditors were unable to verify the completeness of gifts and donations revenue and the completeness of school generated funds. The Greater Southern Separate Catholic Francophone Education Region No. 4 received a qualified report because the cost of a school jointly operated with another school jurisdiction was not reflected in its capital assets.

All other school jurisdiction auditors reported that the 2011 financial statements were presented fairly in accordance with Canadian generally accepted accounting principles (GAAP).

Financial statements—Of the 77 school jurisdictions, 24 school boards and 3 charter schools incurred annual operating deficits for the year ended August 31, 2011 (2010 – 39 school boards and 8 charter schools). Annual operating deficits are acceptable to the Department as long as jurisdictions have sufficient accumulated operating surpluses available to cover the shortfall. Three jurisdictions reporting annual operating deficits: Canadian Rockies Regional Division No. 12, East Central Francophone Education Region No. 3, and Rocky View School Division No. 41 did not have sufficient accumulated surpluses to cover their annual operating deficits.

School jurisdictions with accumulated operating deficits are expected to work with the Department to eliminate the accumulated operating deficit in accordance with a Minister approved deficit elimination plan. The Department has reviewed the nature of the accumulated operating deficits and is working with the jurisdictions to eliminate them.

The total annual operating surplus of these 77 school jurisdictions combined was $14.0 million for the year ended August 31, 2011, compared to an operating deficit of $15.6 million for the same school jurisdictions for the year ended August 31, 2010. The total accumulated operating surplus for these 77 jurisdictions decreased from $330 million at August 31, 2010 to $320 million at August 31, 2011. This decrease is attributable to jurisdictions incurring annual operating deficits, using operating reserves to acquire capital assets and making transfers to capital reserves.

Management letters—The following is a summary of the audit findings and recommendations reported to 77 school jurisdictions by their auditors for the year ended August 31, 2011. There were a total of 188 recommendations made to these school jurisdictions for the year ended August 31, 2011, as compared to 227 recommendations for the year ended August 31, 2010.

We have grouped our summary of audit findings into the following categories:

- financial reporting and governance
- internal control weaknesses and
- information technology management

Users of this summary should keep in mind that the audits from which these findings came were not designed to assess all key control and accountability systems.

Financial reporting and governance

- **Accounting Issues—**18 jurisdictions (including 5 of the 22 reported in 2010) need to resolve accounting issues relating to non-monetary transactions, proper recording, reviewing and reconciling of journal entries, following proper accounting policies and guidelines to ensure proper information are disclosed in the financial statements and increase familiarity with PSAB standards and drafting a plan to adopt the changes required for the August 31, 2013 year end.

- **Board approval—**1 jurisdiction (including 0 of the 3 reported in 2010) needs to ensure that board minutes are approved.
- **Board oversight—**5 jurisdictions (including 1 of the 3 reported in 2010) need to ensure that the board receives timely information in areas such as monthly or quarterly financial statements and progress on recommendations in the auditor's management letter to maintain and strengthen overall stewardship and that the finance committee takes on a more proactive financial oversight role.
- **Budgetary process—**3 jurisdictions (including 1 of the 4 reported in 2010) need to improve their budgetary processes.
- **Review of financial information—** 15 jurisdictions (including 4 of the 8 reported in 2010) need to improve their review of financial information such as bank reconciliations, journal entries, monthly financial statements and variances between budget and actual expenditures.
- **Timeliness of financial recording—** 3 jurisdictions (including 1of the 4 reported in 2010) need to ensure accounting transactions for capital assets and capital grant expenditures, accruals, receivables or financial statements are prepared or recorded on a regular and timely basis.
- **Personnel and staff shortages—** 5 jurisdictions (0 reported in 2010) need to implement succession plans or cross-training for key financial positions.

Internal control weaknesses

- **Cash management—**3 jurisdictions (including 3 of the 17 reported in 2010) need to improve cash management processes and controls.
- **Capital assets—**3 jurisdictions (including 1 of the 10 reported in 2010) need to improve the recording and tracking of capital assets.
- **Goods and Services Tax—**4 jurisdictions (including 1 of the 4 reported in 2010) need to improve their processes for charging the appropriate amount of GST and for recording the accurate amount of GST paid and recoverable.
- **Payroll—**13 jurisdictions (including 5 of the 18 reported in 2010) need to improve controls over the accuracy of and access to payroll information.
- **Policies and Procedures—**19 jurisdictions (including 7 of the 11 reported in 2010) need to update or implement formal procedures and policies.
- **Purchases—**13 jurisdictions (including 5 of the 9 reported in 2010) need to improve controls over the purchase cycle such as the review and authorization processes over purchases and payments, employee sign off for goods received and retention of supporting documentation.
- **Segregation of duties—**8 jurisdictions (including 5 of the 9 reported in 2010) need to segregate duties over authorization and recording of transactions or custody of and accounting for certain assets.
- **School generated funds—**19 school jurisdictions (including 9 of the 18 reported in 2010) need to improve the processes used to collect, record, spend and report school generated funds.

Information technology management

- **Computer security—**14 jurisdictions (including 9 of the 15 reported in 2010) need to improve computer security processes by having unique individual usernames and passwords, implementing a mandatory password change policy, backing up data at an offsite location and developing and implementing a Disaster Recovery Plan.
- **Change management—**3 jurisdictions (including the 1 reported in 2010) need to implement or enhance formal, documented policies and procedures for managing and testing changes to system and network software or hardware.

No recommendations

For the year ended August 31, 2011, auditors for 21 school jurisdictions did not report any findings and recommendations to management. This compares to 19 for the year ended August 31, 2010.

The Department contacts jurisdictions, where necessary, to encourage them to deal with the issues raised in the management letters, particularly recommendations repeated from prior years.

Energy

Summary

Department

The Department of Energy should:

- improve controls over its royalty adjustment note disclosure—see next column
- ensure bioenergy grant recipients comply with grant agreements—see page 96

We repeated our recommendation to the Department to improve processes to recognize royalty revenue estimates as we continued to identify accounting errors and inconsistencies in the methods applied for bitumen royalty estimation—see page 97.

The Department has implemented our October 2009 recommendations to improve controls over the revenue forecasting system—see page 98.

Energy Resources Conservation Board

The ERCB has implemented our October 2005 recommendation to improve its systems for monitoring the timeliness of oil and gas companies' suspension and abandonment of oil and gas sites—see page 98.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from the current audit

Improve controls over royalty adjustments note disclosure

Background

The financial statements of both the Ministry and Department include a note disclosure that quantifies the oil and gas royalty reduction programs. As stated in the note disclosure, the intent of these programs is to encourage industry to produce from wells which otherwise would not be economically productive. The dollar amount of royalty adjustments is significant and provides additional information to users of the financial statements when analyzing royalty revenues.

Recommendation: Improve controls over royalty information

13 RECOMMENDATION

We recommend that the Department of Energy improve its controls over the completeness and accuracy of royalty information disclosed in the financial statements.

Criteria: the standards for our audit

Effective controls over amounts included in significant note disclosures are necessary to allow for an appropriate understanding of the financial statement amounts.

Our audit findings

Key findings

- One program was included in the royalty adjustment note disclosure using amounts over multiple years rather than the current year, resulting in a $454 million overstatement in the amounts disclosed in the notes to the fiinacial statements.
- Three programs were not included in the royalty adjustment note disclosure, resulting in a $125 million understatement in the amounts disclosed in the notes to the fiinacial statements.

The Department's process to review and verify the accuracy and completeness of the royalty adjustment amount disclosed in the financial statements is not operating effectively. We found that the natural gas deep drilling program was incorrectly included cumulatively from January 1, 2009, which resulted in a $454 million overstatement. Also, we found that three programs: shale gas, coalbed methane, and horizontal gas and oil new well royalty rates, were not included in the amount disclosed in the note, which resulted in a $125 million understatement. The errors were corrected by the Department. The misstatements in the royalty adjustments note disclosure did not have an impact on the royalty revenue amounts recorded in the statement of operations.

Implications and risks if recommendation not implemented

Without effective controls and review of amounts included in the royalty adjustments note disclosure, the amounts could be significantly misstated. This could result in users of the financial statements being misinformed about the amount of royalty reduction programs.

Ensuring compliance with terms of bioenergy grant agreements

Background

The bioenergy producer credit grant program is provided to industry to encourage the development of bioenergy products, including renewable fuels, electricity and heat. For the year ended March 31, 2012, the Department paid $42 million for biofuel initiatives. The funds received by recipients are based on the amount of reported fuel and electrical output. Bioenergy producers who qualify for the grant submit production information in order to receive payment. Additionally, all grant recipients are required to provide annual reporting on a number of items, including the energy product produced and sold, the production capacity, greenhouse gas emissions, as well as the feedstock, water and external energy consumed.

Recommendation: Ensure compliance with terms of bioenergy grant agreements

14 RECOMMENDATION

We recommend that the Department of Energy ensure that recipients under the bioenergy producer credit grant program are complying with their grant agreements.

Criteria: the standards for our audit

The terms and conditions of grant agreements should be enforced to ensure compliance and to verify the program objectives are being met.

Our audit findings

Key findings

- The Department does not have a process to ensure bioenergy credit grant recipients are submitting annual reports as required by their grant agreements.
- Five of six grant recipients examined had not submitted required annual reports.

Annual reports, under the terms of the grant agreements, are required to be submitted by grant recipients within the timeline stipulated in their individual agreements. Based upon our examination of six recipients, we found that five of them had not submitted an annual report within the agreed upon timeframes. At the time of our examination in early May 2012, the annual reports had still not been received. The one other recipient we examined had submitted a report, but based on the information included, it had not met the requirements of the grant agreement. We did not identify any documented evidence that the Department requested or followed up the reports.

Implications and risks if recommendation not implemented

Without timely receipt and review of the annual reports from bioenergy producers, the Department may not be receiving the information it requires to assess compliance with grant agreements and to assess whether the objectives of the bioenergy producer credit program are being met.

Matters from prior-year audits

Improve processes over royalty revenue estimates recognized in the financial statements—recommendation repeated

Background

In our *November 2011 Report* (no. 13—page 89), we recommended that the Department of Energy improve its processes over bitumen and natural gas royalty revenue estimates included in the financial statements. We repeat this recommendation because we continue to identify errors in the bitumen royalty estimate as a result of inconsistent application of estimation methods.

Recommendation: Improve processes over bitumen royalty revenue estimates recognized in the financial statements—recommendation repeated

15 RECOMMENDATION

We again recommend that the Department of Energy improve its controls to ensure consistent application of methodology used to calculate bitumen royalty estimates.

Criteria: the standards for our audit

The Department should have effective and consistent processes for significant and complex estimates to ensure the accuracy of royalty revenues recorded in the financial statements

Our audit findings

Key findings

- Two misstatements in the financial statements were identified, resulting in $34 million of bitumen royalty revenue adjustments.
- Control weaknesses previously identified in the natural gas royalty revenue estimation process have been resolved.

Based upon our examination of the bitumen royalty estimate, we identified two misstatements that the Department subsequently adjusted:

- updated information received from two producers was not incorporated into the estimate, which resulted in misstatements of $20 million
- $14 million in errors resulting from end of period statement adjustments filed by oilsand producer not being reflected in the financial statements

The inherent risk of misstatement for the bitumen royalty estimate is high, due to the amount, frequency and timing of information being received to compile the estimate. This makes effective controls and processes to mitigate that risk very important. We did note that the Department has been increasingly proactive in identifying and communicating new transactions that impact bitumen royalties to reduce the risk of misstatements in the estimate. However, due to the errors identified, which are similar in nature to those found in the prior year, we have repeated our recommendation to the Department to improve its processes to ensure methods for bitumen royalty estimation are consistent and accurate.

For the natural gas royalty estimate, we had previously identified a control weakness whereby key cost adjustment information used in the calculation of the estimate was not being reviewed at the appropriate time, which resulted in a significant late adjustment to the financial statements. Based upon our follow-up of this process, we verified that the review is being completed well in advance of the preparation of the draft financial statements.

Implications and risks if recommendation not implemented

Estimates comprise a significant component of royalty revenues; thus, if assumptions and calculation methods are inconsistent, the risk of material financial misstatement is increased.

Improve controls over the revenue forecast system—implemented

Our audit findings

The Department implemented our *October 2009 Report* recommendation (no. 21—page 199) to improve its controls and documentation of the revenue forecast model. Based upon our examination of the forecast model, we found that the documentation has continued to improve, and now includes information related to all critical elements of the forecast model. There is also a process to update and modify the documentation as necessary.

Energy Resources Conservation Board

Matters from prior-year audits

Improve system for monitoring timelines of oil and gas companies' suspension and abandonment of oil and gas sites—implemented

Background

In 2004–2005, we audited systems the ERCB had in place to ensure oil and gas wells, facilities and pipelines were being appropriately suspended and abandoned. Based on our examination, we recommended in our *October 2005 Report* (no. 30—page 173) that ERCB improve its systems for monitoring the timeliness of oil and gas companies' suspension and abandonment of oil and gas sites. In 2012, we conducted follow-up work to assess ERCB's progress in implementing the recommendation. Thus, the scope of our audit was focused on determining whether ERCB had a system in place to evaluate the timeliness of suspension and abandonment to provide information for decision makers, and did not include ERCB's program to manage the risks of aging infrastructure, and any possible related financial liability.

Our audit findings

Overall, we found that ERCB established a system to monitor activities of inactive, suspended, and abandoned wells, pipelines and oil field waste management facilities. The monitoring program was developed to assist ERCB, and its regulatory comittee, in making an informed assessment when considering existing processes and potential future changes. Of a broader scope than the monitoring program, which is primarily focused on monitoring timeliness, ERCB has also initiated a program to manage the risks of aging infrastructure, and the related financial liability. Two components currently underway are inactive facilities suspension and abandonment requirements, and potential timelines for inactive well abandonment. These activities were not within the scope of the audit.

Enterprise and Advanced Education—Ministry and Department

Summary

The Department of Enterprise and Advanced Education provides financial services and prepares financial statements for six entities:

- Ministry of Enterprise and Advanced Education
- the Department itself
- Access to the Future Fund
- Alberta Innovates – Bio Solutions
- Alberta Innovates – Energy and Environment Solutions
- Alberta Enterprise Corporation

While the Department has financial processes and controls, we recommend that they improve them. We received multiple drafts of financial statements for these six entities and identified many errors and inconsistencies that the Department's finance staff did not identify. We recognize that the Department experienced staff turnover close to year-end. However, the issues we identified were due to insufficient training on transactions unique to these entities, ineffective monitoring and quality controls over financial statements preparation, and manual processes that resulted in delays and errors. We issued unqualified audit opinions on all these financial statements after the Department corrected the errors we identified.

We also recommend that the Department work with the Office of the Controller, universities, colleges and technical institutes to efficiently resolve accounting issues across the sector. The Department has not resolved issues related to:

- identifying, assessing and appropriately accounting for government partnerships, joint ventures and other legal relationships to allow institutions to assess and manage their business, legal and financial risks related to these arrangements
- disclosures required by the *Charitable Fund-raising Regulation*[1]

The Department plans to work with Service Alberta, which is responsible for the *Charitable Fund-raising Regulation.* The Department should also work with post-secondary institutions to develop a plan with objectives, deliverables and timelines as institutions implement public sector accounting standards in 2013. A clear plan will help institutions implement the new standards and make the necessary changes to their systems, policies and processes.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Matters from the current audit

Financial reporting processes and controls

Background

The Department is responsible for preparing financial statements and accompanying notes and schedules, for itself as well as for the Ministry of Enterprise and Advanced Education, the Access to the Future Fund, two Alberta Innovates corporations and Alberta Enterprise Corporation. For all six entities, management must prepare financial statements in accordance with Canadian public sector accounting standards. The Department also prepares working papers that support these financial statements.

The Government of Alberta's Office of the Controller sets year-end timelines to coordinate completion of financial statements by all government ministries. The ministries' financial statements in turn form the basis of the province's consolidated financial statements. The Department must operate within these timelines. In fulfilling this responsibility, management should follow effective systems and processes for financial reporting.

[36] Section 6 (2) of *the Charitable Fund-raising Regulation*

The Department has developed pro forma financial statements for the Alberta Innovates corporations and Alberta Enterprise Corporation. It has also developed standard reporting templates and processes for post-secondary institutions to report their financial information to the Department for consolidation in the Ministry's financial statements.

Recommendation: Improve financial reporting processes

16 RECOMMENDATION

We recommend that the Department of Enterprise and Advanced Education improve its financial reporting processes by:

- training staff on the policies, processes and controls related to preparing the financial statements
- improving its monitoring and review processes to ensure accuracy of the financial information
- reducing its reliance on manual processes, to increase the efficiency and accuracy of financial reporting

Criteria: the standards we used for our audit

The Department should have effective systems to produce timely and accurate year-end financial information, financial statements and supporting working papers. This requires:

- clearly documented policies, processes and controls
- clearly documented roles and responsibilities
- staff properly trained on the policies, processes and controls relating to their roles and responsibilities
- effective monitoring and review processes
- reconciliations on key accounts

Our audit findings

Key findings

We found many errors and inconsistencies in financial statements, due to:

- insufficient training on transactions unique to the entities
- ineffective monitoring and quality control processes
- manual processes that resulted in delays

The Department reallocated staff and hired temporary staff to help in the year-end process because key finance staff left close to year-end. However, while we recognize the staffing challenges, we also identified several weaknesses in the Department's financial reporting processes. We issued unqualified audit opinions on the financial statements for all entities for which the Department prepared statements after they corrected the errors we found.

For example, we identified that the Department had:

- incorrectly restated the 2011 comparative information in the Ministry's financial statements for changes in estimates—The consolidation is an estimate on March 31. Therefore, any changes to this estimate should be reflected in the current year's financial statements; it should not cause the Department to restate the 2011 information. We have discussed this with management in past years. The Office of the Controller also instructed the Department to not restate its financial statements for these changes in estimates. Management did not identify this error during their review of the financial statements.
- incorrectly accounted for restricted grants as unrestricted grants—The Department adjusted financial statements for Energy and Environment Solutions by $1.8 million and for Bio Solutions by $1.9 million to correct the errors.

- not provided financial statements and audit working papers at the start of each audit—We received multiple versions of financial statements for all entities, with recurring discrepancies or errors that we identified. Additionally, the supporting working papers were not updated along with the financial statements and, therefore, did not agree to the updated statements.
- provided Ministry statements a week after the timelines set by the Office of the Controller
- not adequately reviewed working papers that supported contractual obligations—For example, we identified that the listings for the Department and Energy and Environment Solutions were incomplete. Management subsequently corrected these errors in the financial statements.

The Department is under significant time pressure to meet year-end financial reporting deadlines for six entities. The Department prepares the financial statements and supporting working papers using Word and Excel, which require manual processes that are prone to error. In addition, the Ministry consolidation includes manual processes that requires a significant amount of time to complete. However, the Department has not explored options to use other automated reporting tools to prepare the financial statements and supporting working papers for these entities.

Based on our work and discussions with staff, we concluded that the issues above were due to insufficient training on the transactions unique to these entities, ineffective monitoring and quality control over financial statements preparation, and manual processes that resulted in delays and errors.

To prepare timely and accurate periodic and year-end financial information, the Department can benefit from the considerations and good practices we outlined in our *April 2010 Report* (page 163).

Implications and risks if recommendation not implemented

Without effective controls over its financial reporting processes, the Department cannot be sure, or demonstrate, that its operations are efficient and effective, and cannot promptly and accurately report the financial results that management and boards need for decision making.

Resolution of sector accounting issues

Background

Financial statements for public post-secondary institutions are consolidated in the financial statements of the Ministry of Enterprise and Advanced Education and the Government of Alberta. Therefore, accounting issues for entities within the sector may impact both the Ministry and the Government of Alberta financial statements.

In addition, institutions need to implement the new public sector accounting standards for their 2013 year-ends, with the 2012 financial results restated to reflect the same standards. This may require greater coordination and more consistent accounting policies and reporting practices within the sector.

Recommendation: Resolve outstanding sector accounting issues

17 RECOMMENDATION

We recommend that the Department of Enterprise and Advanced Education work with the Office of the Controller and institutions to develop a process for efficient resolution of accounting issues in the post-secondary sector.

Criteria: the standards we used for our audit

The Department of Enterprise and Advanced Education and the Office of the Controller should have an efficient process to resolve accounting issues and, where needed, to ensure consistent financial reporting within the sector.

Our audit findings

Key findings

- List of partnerships, joint ventures and other business arrangements in sector is incomplete.
- Post-secondary institutions have not fully assessed business, legal and financial impacts of partnerships, joint ventures and other business arrangements.
- Department and post-secondary institutions lack clear plan to transition to new public accounting standards.
- Pro forma financial statements do not include required legislative disclosures.

Government partnerships, joint ventures and other business arrangements

Last year, the Department and institutions developed:

- a preliminary list of the partnerships, joint ventures and entities they control
- a questionnaire to help institutions identify potential related parties
- a document they can use to assess their relationship with identified entities

The preliminary list of entities included:

- Alberta Association in Higher Education for Information Technology
- Apply Alberta
- eCampus Alberta
- Alberta Rural Development Network
- Alberta Association of Colleges and Technical Institutes
- uDigit Systems

Alberta's post-secondary institutions created these entities to obtain certain services and to provide opportunities for students to enroll in programs in remote areas or through online learning. Institutions are the members of these entities and appoint boards of directors from among their senior executives. As part of our financial statements audit of the Ministry, we concluded that Alberta's post-secondary institutions collectively control these entities.

As part of the transition to public sector accounting standards, the Department, institutions and Treasury Board and Finance concluded in March 2012 that the Department and institutions must:

- determine which entities the institutions control, individually or collectively
- consolidate those entities in the Ministry's financial statements, depending on whether their impact is material to the financial statements
- work together to obtain retroactive approval from the Lieutenant Governor in Council for entities identified that require, but do not have the approval required under section 77 of the *Post-secondary Learning Act* and section 80 of the *Financial Administration Act*

However, the Department and institutions have not:

- compiled a complete list of their partnerships, joint ventures and other business arrangements—Having a complete inventory would allow institutions and the Department to manage the business, legal and financial risks related to these entities.
- completed their assessments of government and institutions partnerships, joint ventures and other legal arrangements
- ensured that entities they control comply with all legislation applicable to these entities—The Department and institutions also have not assessed whether the Lieutenant Governor in Council approval was required to incorporate entities that are considered controlled, individually or collectively, by institutions.

- appropriately included the controlled entities in the Ministry and government financial statements—For example, the Ministry's financial statements include the Canada School for Energy and Environment, a joint venture between three universities, but do not include Apply Alberta. Ministry financial statements should either consolidate controlled entities, based on materiality, or disclose these entities and the Ministry's transactions with them.

Furthermore, the Department has not reviewed the guidance and procedures it provides to institutions to ensure they comply with legislation when they incorporate new entities. The Department told us that it recognizes the issues we highlight but is waiting for direction from the Department of Treasury Board and Finance before proceeding to resolve them.

Transition to new public sector accounting standards

The Department, post-secondary institutions and the Office of the Controller formed a steering committee to assess those areas that will have the most significant impact for institutions as they implement public sector accounting standards in 2013. In March 2012, they approved several documents that conclude how institutions should implement certain accounting standards. They also identified that the Office of the Controller, working with institutions, still needs to make certain accounting policy choices for the sector. While we agreed in principle with the conclusions reached, we provided several comments that need to be resolved to allow institutions to implement the new standards.

However, the Department and institutions do not yet have a clear plan to update the documents, make the required policy choices, analyze the remaining differences in accounting standards, and develop pro forma financial statements using the new public sector accounting standards. Such a plan should identify objectives, deliverables and timelines. Institutions need this information to prepare to implement the new standards and make any necessary changes to their own systems, policies and processes.

The Department also has not developed a plan to assess the impacts and changes required to the Ministry's consolidation processes. Since institutions are consolidated into the Ministry's financial statements, greater coordination and planning is required to ensure the Department can prepare the 2013 financial statements within the Office of the Controller's timelines.

Charitable fund-raising disclosures in pro forma financial statements

The Department's pro forma financial statements did not include the disclosures required by the *Charitable Fund-raising Regulation.* The Department told us that it plans to work with the Department of Service Alberta, which is responsible for this regulation, to review its relevance and applicability to post-secondary institutions. As a result, most institutions did not include these required disclosures in their financial statements. While we concluded that this omission did not affect the opinion in our auditor's reports, it meant that most institutions did not comply with this regulation.

Implications and risks if recommendation not implemented

Ineffective processes to resolve accounting and reporting issues across the sector could result in incorrect financial results and inefficiencies from duplicated efforts for reassessments.

Enterprise and Advanced Education—Post-secondary Institutions, Alberta Innovates Corporations and Alberta Enterprise Corporation

Summary

Update—Our *March 2012 Report* said that boards and audit committees must hold management accountable for implementing and maintaining effective processes and internal controls. We also issued a report card on universities' internal controls over financial reporting. This report includes the results from our March 31, 2012 financial statement audits and an update on the report card. Our next report will include the results of our audits at the colleges and technical institutions.

Athabasca University improved its processes to prepare accurate financial statements, but we make two new recommendations on enterprise risk management systems and conflicts of interest. For a University providing online learning, these new recommendations together with our five outstanding recommendations on information technology are critical to achieve its objectives cost-effectively. Thus, on the internal report card (see page 106), we concluded that Athabasca University needs to significantly improve its internal controls.

The University of Calgary considerably improved its internal control environment, and continues to implement an enterprise risk management system. It also improved its process to produce accurate financial statements. But these improvements delayed the preparation of complete and accurate financial statements.

The University of Alberta and **University of Lethbridge** continue to have effective processes to prepare accurate financial statements, and they continue to implement our recommendations.

This report is based on findings from our March 31, 2012 financial statements audits of the University of Alberta, University of Calgary, University of Lethbridge, Athabasca University, and the Alberta Innovates Corporations—Bio Solutions, Energy and Environment Solutions, Health Solutions and Technology Futures. We did not identify any recommendations for the Alberta Innovates Corporations and Alberta Enterprise Corporation.

Internal controls—a report card

To effectively govern, boards need accurate and timely financial information—throughout the year, not just at year-end. To effectively manage, management needs the same information. We see a direct correlation between a strong year-end process to prepare financial statements and the ability to prepare quality financial information throughout the year. We evaluated the following key indicators of effective financial processes and internal controls:

- the time it took institutions to prepare complete and accurate year-end financial statements
- the quality and number of draft financial statements we received
- the number of errors our audit found
- the number and type of recommendations in our management letters and public reports

Internal controls—a report card

◆ (red)	Significant improvements needed.
▲ (yellow)	Improvement required, but not to the same extent as the red items. Yellow items may be associated with a management letter recommendation. They are more representative of where an institution can improve as opposed to something that requires significant, immediate attention.
● (green)	No significant weaknesses found in the control environment.

Institution	Financial statement preparation		Outstanding recommendations
	Accuracy*	Timeliness	
Athabasca University			
2012	●	●	◆
2011	▲	●	▲
University of Alberta			
2012	●	●	▲
2011	●	●	▲
University of Calgary			
2012	●	▲	▲
2011	▲	●	◆
University of Lethbridge			
2012	●	●	●
2011	●	●	●

* We issued unqualified audit opinions on the financial statements of all 4 universities. Accuracy refers to the completeness and accuracy of the draft financial statements that management gives us at the start of the audit. An institution could have a yellow or red ranking, yet still receive an unqualified opinion as errors and disclosure deficiencies can be corrected in the audit process. The number of errors and disclosures deficiencies we find in the draft financial statements (which management needs to correct) indicates how effective financial controls are to prepare accurate financial statements.

Recommendations to individual institutions

Athabasca University

Summary

Athabasca University should:

- implement effective risk management systems
- implement a process for staff to annually disclose potential conflicts of interest in writing so the University can manage them proactively

The University has implemented our *October 2009 Report* (page 162) recommendation to improve its information technology control framework by formalizing its IT risk and control framework.

Enterprise risk management

Background

Boards are responsible for overseeing an institution's risk management systems. Often, the board's audit committee plays a role in providing the oversight. To do so, the board must assess and monitor management's processes that identify and manage the institution's risks. Senior management is responsible to implement effective risk management systems and report to the board on the institution's key risks and mitigating strategies. Risks are generally categorized as strategic, financial, operational, reporting, compliance and reputational risks.

Recommendation: Implement enterprise risk management systems

18 RECOMMENDATION

We recommend that Athabasca University implement an effective risk management system.

Criteria: the standards we used for our audit

The board should clearly identify whether the entire board or a specific board committee is responsible for enterprise risk management.

Management should:

- clearly define roles and responsibilities for risk management
- implement processes to identify and assess the risks associated with achieving the entity's objectives
- implement programs or procedures to manage the risks
- monitor and evaluate risks and the programs or procedures to manage them
- report the risks and actions to senior management and the board

Our audit findings

Key findings

The University:

- has approved a risk management framework
- does not continuously identify, rank, manage and report on enterprise risk in a systematic way

The University's Audit Committee's terms of reference include oversight of risk management by assessing the effectiveness of management's systems to identify, understand, monitor and control major risk exposures affecting the University. The terms of reference also state the Audit Committee must ensure management uses appropriate certification processes to regularly verify compliance with key risk management policies. The University has several processes such as strategic planning, review and approval for new programs and degrees, and processes for information technology risk assessment where risks are identified and managed.

The University developed and approved a risk management framework in May 2012. The framework requires management to define risks and rank their likelihood and impact. It also requires management to identify strategies for managing high-level risk, and decide who is accountable for managing those risks.

The University has not implemented the underlying structures and processes needed to apply the framework throughout the University and to ensure its enterprise risk management systems operate throughout the year. Nor has it integrated its IT risk management systems with its enterprise risk management systems. This includes:

- establishing risk management governance, including clear roles and responsibilities for risk management through the entire University
- defining risk tolerance levels that the University is willing to take, and communicating this to staff—In defining risk tolerance, the University should also consider incorporating not just risk management, but also identifying opportunities for improvements to programs, policies and processes.
- implementing processes to identify and regularly update risks associated with achieving the University's objectives
- monitoring and evaluating risks and the programs or procedures to manage them

- setting measures and targets for risk mitigation strategies
- regularly reporting the risks and actions to senior management and the board—The University can use the measures and targets to determine if it needs to change the mitigation strategies.

Implications and risks if recommendation not implemented

Athabasca University may not identify and manage risk efficiently and effectively, and the board and its audit committee might not effectively oversee the University's risk management systems.

Conflict of interest policies

Background

A conflict of interest policy defines and clearly sets out an organization's expectation that employees disclose and avoid potential conflicts of interest. It also provides guidance to employees for identifying possible conflicts of interest. The University has a policy that defines possible conflicts and requires staff to declare those conflicts to the president when they arise.

Recommendation: Improve conflict of interest procedures

19 RECOMMENDATION

We recommend that Athabasca University update its policy and procedures, and implement a process for staff to annually disclose potential conflicts of interest in writing so the University can manage the conflicts proactively.

Criteria: the standards we used for our audit

The University should have effective policies and processes to manage conflicts of interest. These policies should define acceptable business practices and standards of behaviour to guide employees and influence the tone of its control environment.

Our audit findings

Key findings

- Conflict of interest policy exists but is outdated.
- Staff required to raise potential conflicts when they arise, but the University has no procedures on how and who should manage declared conflicts.
- Staff not required to annually declare potential conflicts to allow proactive management of conflicts.

The University developed its conflict of interest policy in 1999 and updated it in 2001. It requires employees to disclose any conflicts of interest, real or perceived, in writing to the president. However, it does not reflect the University's current business practices as staff may also declare conflicts of interest during meetings where certain decisions are made. The University also does not have clear procedures on how and who will manage potential conflicts of interest. For example, some situations may arise where a conflict exists, but can be managed with appropriate monitoring and reporting. The policy also does not require employees to declare annually and in writing any potential conflicts of interest. Although continuous disclosure is still essential, annual declarations would allow the University to recognize potential conflicts of interest and manage them proactively and appropriately. For example, some Alberta post-secondary institutions require staff who are authorized to sign contracts, buy goods and services, or who have signing authority over budget funds, to annually declare their own and their immediate family members' interest or position in a company that is a proprietorship, partnership or corporation. This allows the University to proactively manage real or perceived conflicts of interest.

Implications and risks if recommendation not implemented

The University may be unable to properly manage the financial, business and legal risks of real or perceived conflicts of interest.

Information technology resumption plan—progress report

Background

In our *October 2010 Report* (No. 10, page 11), we recommended that Athabasca University improve its information technology resumption "system recovery" planning and capability. In 2010, the University performed a risk assessment on its IT resumption capability. The assessment confirmed the University would not be able to recover its critical student IT services from a catastrophic failure at their data centre in Athabasca. In 2011, the University initiated a project to update its recovery plans and capabilities.

Management's actions

Athabasca University has not established a disaster recovery plan and capability for its main data centre. The University deferred the disaster recovery project by directing the required funding and IT resources for an offsite recovery facility to the new Administrative Systems Renewal Project.

To mitigate some of the risks for this delay, the University:

- improved its current systems to strengthen system availability and capacity—The University has improved its network to provide redundant services and improved systems monitoring, and has installed a new high capacity UPS (uninterrupted power supply) service. It is also installing desktop virtualization to enhance backup and recovery services.
- planned to reduce its dependency on internal systems through the use of external systems providers
- continued to plan and negotiate with SAIT to provide a second data centre site for its core systems
- entered into a consortium with several other Alberta institutions to evaluate alternatives to hosting core IT services

The University continues to evaluate alternatives to establishing a system recovery capability and is trying to improve the stability of its systems. However, the risk of not being able to recover from a catastrophic failure at its data centre in Athabasca remains high until this recommendation is implemented.

Implications and risks if recommendation not implemented

Without a functional disaster recovery plan, facilities and equipment, the University may not be able to systematically recover data or resume critical business and student services within required timeframes.

IT risk and control framework

Our audit findings

Athabasca University has implemented our *October 2009 Report* (page 162) recommendation to improve its information technology control framework by formalizing its IT risk and control framework. The University updated its risk assessment details and framework documentation using the CoBIT[1] control procedure references as mitigations for high-risk areas such as IT security, change management and user access.

The IT control framework has four main documents:
- risk framework project report—provides details on IT and business scope for assessment, assessment process and business area participants, initial assessment results and risk mitigation details
- risk assessment report—defines assessment methodology, sets risk priority and reports revised risk assessment results, residual risks and additional mitigations, accountabilities and links to the University's business plan
- risk registry—summarizes risk assessment results and includes CoBIT control objective and procedure references
- IT policies and control procedures—designed and implemented for high-risk IT services at the University, following CoBIT controls standards

The University continues to participate in the sector-wide information technology management control framework project sponsored by the Department of Enterprise and Advanced Education and the Alberta Association in Higher Education for Information Technology. It will consider any further guidance to further enhance and improve IT controls through its internal information technology management project.

University of Alberta Summary

The University of Alberta should improve its bookstore inventory policies and processes to identify obsolete inventory and regularly review cost of goods it holds in inventory.

Bookstore controls and inventory management

Background

The University of Alberta is responsible for buying, selling, managing inventories and keeping records at its bookstores. The University has several bookstores on and off campus. The bookstores generate revenues of $25 million annually.

Recommendation: Improve controls over bookstore inventory

20 RECOMMENDATION

We recommend that the University of Alberta:
- improve its controls to value the bookstore's inventory
- develop policies and processes to identify obsolete inventory in its bookstores and in storage
- develop processes to regularly review the cost of goods it holds in inventory

Criteria: the standards we used for our audit

The University should have effective processes for managing bookstore sales, purchases and inventory.

1 CoBIT – Control objectives for information and related technology framework,—provided by the ISACA (information system audit and control association).

Our audit findings

Key findings

University wrote off $8.8 million of inventory because:
- its computer system had incorrect costs for inventory items
- management had not previously identified obsolete inventory

During their annual inventory count in 2012, bookstore management identified that their records overvalued the bookstores' inventory by $8.8 million, for two reasons:
- The inventory records listed incorrect costs for some items. This resulted from ineffective processes to identify incorrect coding of adjustments in the system and from invoice entry processes not being followed. The errors had been accumulating for a number of years.
- The University had not written off obsolete inventory in prior years. The University does not have effective processes to identify obsolete inventory in its bookstores or at their offsite storage location.

The University's internal auditor also issued a report in February 2012, highlighting control improvements needed to manage its inventory.

Implications and risks if recommendation not implemented

Ineffective processes and controls over inventory could result in undetected fraud and error in the bookstore's operations, as well as missing refunds for returning books to suppliers. Also, inaccurate inventory data and valuations could lead to ineffective oversight and management of the bookstore.

University of Calgary Summary

We identified one new internal control matter at the University during our current year's audit, related to timely termination of users' access privileges.

The University of Calgary has implemented the following recommendations from prior years' audits to improve:
- the University's control environment
- policies on costs for hosting guests and staff working sessions
- the employee expense claims process
- processes to comply with legislation

Timely termination of users' access privileges

Background

The University uses the PeopleSoft computer system to manage everything from student registrations to finances. This system has an automated process to remove employees' and contractors' computer access when they leave their jobs at the University. When the human resources department enters a person's termination date into the system, it automatically removes their user rights within PeopleSoft.

However, the system will automatically remove only those user rights that it assigned in the first place. Any roles that were added manually to a user's profile must also be removed manually. This includes any roles that would have been assigned before the University implemented an identity and access management application. Information Technology staff must also manually disable a user's access to the University's finance and supply chain management application. The user's profile in the human resources module stays active, by design, until the University has manually removed all access rights.

The University's active directory system uses light directory access protocol to authenticate users to University systems, including the PeopleSoft application. This protocol is configured to disable employee accounts 45 days after human resources staff enter the termination record in PeopleSoft.

Recommendation: Remove users' access privileges promptly

21 RECOMMENDATION

We recommend that the University of Calgary:

- define an acceptable timeframe to disable or remove users from the application and the network
- document, communicate and consistently follow a process to deactivate users from the University's information technology systems within the defined timeframe

Criteria: the standards for our audit

The University should have effective controls to ensure that:

- terminations and removal of access are completed within a reasonable timeframe
- the formal process to deactivate users from the University's information technology systems is documented, communicated and consistently followed

Our audit findings

Key findings

- The acceptable timeframe to deactivate users from the University's information technology systems is not documented and communicated.
- Some staff who left the university still had access to the network and the Peoplesoft system for seven days or more.

We found that the University had a process in place to deactivate users from the University's information technology systems. However, the University did not document and communicate an acceptable timeframe for deactivating users. As a result, we found that supervisors of staff who have left the University did not notify the human resources and information technology departments promptly to allow them to remove users from PeopleSoft and the University's network. Based on our sample of users who left the university, we found users who still had access to the system, while access for other users was removed seven or more days after termination. These users had access levels that allowed them to update or change information and to process transactions.

Implications and risks if recommendation not implemented

Unauthorized people may gain access to the University's systems or make changes to sensitive information or restricted transactions.

Improving the University's control environment—implemented

Our audit findings

The University of Calgary implemented our *October 2008 Report* (No. 21, page 213) recommendation to improve the effectiveness of its control environment. The University initiated the IS^2 project, which focused on implementing new accountabilities, authorities, processes and policies enabled by automated workflows, system controls and improved access to information. The University completed the main phases of this project in August 2011. Through this project, the University:

- assessed whether the current mix of centralized and decentralized controls is appropriate to meet its business needs—The University implemented an integrated service delivery team to provide more consistent ways of delivering human resources, information technologies and finance services across the University. The University also redesigned research responsibilities and controls, and improved its financial processes.

- defined clear goals, responsibilities and accountabilities for controls systems design, implementation and monitoring—During 2011, the University's Board of Governors approved the authority and accountability framework. This year, the University completed the delegation of authority policy and related matrices and communicated it to all PeopleSoft users. In addition, the University integrated this authority and accountability framework into the PeopleSoft system to require online approvals according to the framework. We did not identify any deficiencies in our review.
- documented its control environment and business processes and implemented training programs to ensure those responsible for business processes have adequate knowledge to perform their duties—It also developed online interactive simulations of the University's business processes that allow staff to determine how to perform the business processes through PeopleSoft.

The University is developing a plan to monitor controls to ensure processes in the central and decentralized areas operate effectively throughout the year. The University is still implementing monitoring controls. However, we consider the recommendation implemented as the University improved its overall control environment. We will review the University's monitoring controls in future audits to ensure they are well designed and operating effectively.

Policies on costs for hosting guests and staff working sessions—implemented

Our audit findings

The University of Calgary implemented our *April 2010 Report* (page 166) recommendation to introduce policies and guidance on appropriate expenses for events related to hosting guests and staff working sessions. The University implemented a new policy for hospitality and travel expenses. This policy is posted on the University website and has been implemented effective January 1, 2011.

The new policy provides specific guidance on hosting people external to the University, as well as for board meetings and internal working sessions. Moreover, the new policy provides specific guidance on allowable expenses, including the purchase of alcohol, and sets approval guidelines, claim submission guidelines and penalties for non-compliance. We tested the operating effectiveness relating to the key controls for the policy and noted no significant deficiencies in our sample.

Expense claims
Improving employee expense claims process—implemented

Our audit findings

The University of Calgary implemented our *April 2010 Report* (page 166) recommendation to follow its policies and processes for employee expense claims and corporate credit cards. The University implemented a new hospitality and travel expenses policy along with detailed procedures to provide guidance on processing employee expense claims in 2011.

The new policy and procedures provide specific guidance on allowable employee expenses and sets approval guidelines and claim submission guidelines, including the requirement to submit itemized receipts. Furthermore, penalties for non-compliance are outlined within the new policy. We tested the operating effectiveness relating to the key controls for the hospitality and travel expenses policy and related procedures and noted no significant deficiencies in our sample.

The University also implemented a post-pay audit process in December 2011 to ensure compliance with the policies and procedures. This process identified that the supply chain management department did not receive supporting documentation for approximately one-third of the employee expense claims sampled for the period July to October 2011. In April 2012, the University's internal audit department made several recommendations to improve the post-pay audit process, such as timely identification, escalation, reporting and consequences of non-compliance with policies and procedures. We consider the University to have implemented our recommendation, as it has processes to monitor compliance with its policies and procedures.

Improving processes to comply with legislation

Our audit findings

The University of Calgary implemented our *April 2010 Report* (page 169) recommendation to improve its processes to comply with the legistative requirements for issuing gifts and awards to staff, and to implement clear policies and procedures for sponsoring events and making donations. The University implemented a new policy for gifts, donations and sponsorship. It sets specific guidelines on when providing gifts, making donations and sponsoring events are allowed, and has approval and expensing procedures and penalties for non-compliance. This policy is posted on the University website and has been implemented effective January 1, 2011.

The new policy refers to tax implications for the employee receiving the gift, including a direct link to relevant guidance by Canada Revenue Agency. Moreover, the policy includes specific prohibitions against political contributions and donations to non-registered charitable organizations. We tested the operating effectiveness relating to the key controls for the policy and noted no significant deficiencies in our sample.

University of Lethbridge Summary

The University of Lethbridge implemented our recommendation to improve its endowment policies.

Improve endowment policy—implemented

Our audit findings

The University of Lethbridge implemented our *October 2010 Report* (page 118) recommendation to improve its endowment policy and procedures. Last year, the Board of Governors approved a revised endowment management policy, which stated that any unspent investment earnings would be permanently recapitalized to the endowment principal. Further, if investment income did not cover the spending allocation, the University would encroach on the endowment principal with the expectation that the University would recover such amounts from future capitalized investment earnings. The Board also approved a motion to permanently endow the internally restricted endowments.

The University also implemented a process to regularly monitor the endowment growth against an inflation target to ensure that the real value of the endowment was preserved. We noted that management prepared a quarterly analysis for the Finance Committee and the Board that compared the endowment growth against the University's inflation target of the consumer price index. We have verified and reviewed these reports and are satisfied that the University has improved its endowment policies and procedures.

Environment and Sustainable Resource Development

Summary

Department

The Department of Environment and Sustainable Resource Development (formerly the Department of Sustainable Resource Development and the Department of Environment and Water) implemented our recommendation relating to its grant monitoring process—see below.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Matters from prior-year audit

Grant monitoring process—implemented

Background

In our *October 2010 Report* (no. 15—p. 143), we recommended that the Department of Environment and Water improve its monitoring of compliance with conditions in grant agreements and retain evidence of the review.

Our audit findings

We tested the Department's monitoring of conditions set in grant agreements and found substantial improvement. Therefore, we conclude this recommendation has been implemented.

Health

Summary

Department

The Department of Health has implemented:

- the recommendation we made in 2002 to improve corporate control processes for ensuring accountability for conditional grants—see next column
- our October 2009 recommendation to clarify the respective roles of the Department and Alberta Health Services in infection prevention and control compliance monitoring in Alberta—see page 118

Alberta Health Services

We make five new recommendations to Alberta Health Services to:

- improve documentation of its conversions from legacy systems to new systems—see page 119
- improve its monitoring activities to ensure the accuracy of transactions in its payroll system—see page 121
- complete the review of old amounts on the Goods Received Not Invoiced report to validate amounts or resolve issues as they arise before year end—see page 122
- reinforce its admissions policies to ensure consistent application and review its controls over the processes that generate fees and charges revenue—see page 123
- implement a recurring process to ensure significant and/or unusual journal entries are reviewed and approved appropriately—see page 124

In the past year AHS made satisfactory progress:

- developing IT controls and processes—see page 125
- implementing consistent and efficient accounting processes for externally restricted contributions—see page 127

AHS implemented our recommendation to review existing supplementary retirement plans—see page 127.

For outstanding recommendations to the organization that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Accountability for conditional grants—implemented

Background

We made our original recommendation on the accountability for conditional grants in our *October 2002 Report* (page 134) that the Department of Health improve its corporate control processes for ensuring accountability for conditional funding. We repeated the recommendation in our *October 2003 Report* (no. 22—page 152) and again in our *October 2009 Report* (page 252) because the Department had not implemented a monitoring process to ensure that program areas receive and review reports on conditional grants.

Our audit findings

In 2011–2012, we conducted a follow-up audit and noted that the Department has developed a revised grant policy and procedures manual. We reviewed the revised documents and noted that the grant policy provides guidance to program divisions to manage conditional grants. The grant procedures manual describes detailed control processes for each division to follow and holds individual divisions accountable for a set of actions. The manual also includes sample templates that the divisions should use to manage conditional grants. One of the key tools in the manual is a grant monitoring checklist that provides guidance to grant managers on how to monitor and review conditional grants.

We performed a walkthrough of the Department's processes in managing conditional grants. We noted that the processes included how the Department:

- approved grant proposals that the proponents submit—We tested a sample of grants and noted review and approval controls were in place to ensure that proposals were within the Minister's mandate, sufficient funds were available in the program budget, and proposals included measurable outcomes, and risk mitigating strategies
- prepared grant agreements and payment schedules once the Minister approved the grant proposals—The grant procedures manual provides guidance to program divisions to prepare grant agreements. We tested a sample of the agreements and noted that for those grants that were over $15,000, the program divisions provided the agreements and payment schedules to the Department's Financial Planning branch for review of accounting policy compliance and treatment, and to the Legal and Legislative Services branch for legal compliance review. When the grant payments were due, we noted that controls were in place, including grant managers' and expenditure officers' reviews to ensure that the payments matched the amounts in the agreements.

To assess the process that the Department used to monitor conditional grants, we selected a sample of grant files from each program division. We noted that all divisions followed the guidance from the grant procedures manual for reviewing reports from recipients. The grant managers' reviews included assessing whether the recipients used the grants for the intended purposes, and that any significant variances between budget and actual expenses had reasonable explanations. In situations where the recipients did not submit the reports when due, we noted that the Department had an escalating process to ensure the recipients submit reports for its review.

The grant agreements include a provision that upon expiry or termination of grants, the recipients need to return surplus funds, if any, to the Department. The recipients need the Minister's approval to retain the funds. We noted that the Department used the same process for approving the applications of surplus fund retention. We tested a sample of approved and rejected surplus fund applications and noted that grant managers reviewed the applicants' rationale to assess whether to accept or reject the applications.

Based on our audit, we conclude that the Department has implemented a sustainable process to monitor conditional grants.

Currently, each division uses its own system to track and monitor grants. To further enhance the process, management told us that it is in the process of implementing a corporate grant management system to standardize and streamline the recording, tracking and monitoring of conditional grants. The system is expected to be complete by December 2012.

Infection prevention and control—clarifying respective roles in compliance monitoring—implemented

The Department has implemented the recommendation we made in our *October 2009 Report* (page 248) by clarifying its role in the implementation and execution of infection prevention and control compliance monitoring in Alberta. The focus of our work was to determine whether respective roles in IPC compliance monitoring were developed.

Background

In 2009 we reported that the Department had not fully developed its role relative to AHS monitoring activities in the IPC area. We made the original recommendation because a clear understanding of compliance monitoring roles and responsibilities between the Department and AHS is critical to ensuring that healthcare facilities follow applicable IPC standards and practices.

Our audit findings

The Department has clarified its role relative to AHS monitoring activities in the infection prevention and control area. The Department oversees IPC compliance monitoring activities in the province, by periodically reviewing compliance reporting provided by AHS. When deemed necessary, the Department may, from time to time, perform onsite visits to individual facilities to obtain verification and gather additional information. These visits are not a substitute for AHS's IPC compliance monitoring program. Specific IPC accountability and reporting requirements are outlined in the 2011 Standards for Infection Prevention and Control – Accountability and Reporting.[1]

Alberta Health Services Matters from the current audit

Data conversion testing

Background

When the government first set up Alberta Health Services, it consolidated delivery of health services from the former regional health authorities, the Alberta Mental Health Board, the Alberta Cancer Board and the Alberta Alcohol and Drug Abuse Commission. As a consolidated health region, AHS is reducing the redundancy among the separate systems it inherited from its predecessor entities. For example, it is moving all AHS employees onto one centralized human resource management system, called ePeople.

To consolidate its systems, AHS must move data from the old systems (legacy systems) to the new centralized human resource management system. This process is called a data conversion. Converting data to a new system is a complex process because a new system does not always store data in the same format as the old. Also, several types of data in the old system may need to be combined in the new system because AHS is using the data for new functions that the system makes possible.

Data conversions must be carefully tested to ensure that data is completely and accurately transferred from legacy systems to the new system. Conversion testing should also include tests to make sure the new system operates properly; for example, that it properly calculates employee pay.

In 2012, AHS transferred payroll from the former Capital Health Region's system to ePeople. By March 2012, AHS was using ePeople for two-thirds of AHS's total payroll. After payroll for the former Capital Health Region employees was transferred to ePeople, AHS's internal auditors tested the data conversion.

Recommendation: Data conversion testing

22 RECOMMENDATION

We recommend that Alberta Health Services improve documentation of its conversions from legacy systems to new systems by requiring the project team to clearly document how they ensured:
- converted data is complete and accurate
- the new system functions with the converted data as intended

Criteria: the standards for our audit

Data conversion test plans must be:
- designed to test all converted data
- clearly communicated to the conversion team

Data converted from legacy systems to new systems must be tested to ensure:
- the data is completely and accurately brought from the legacy system to the new one
- the new system works as intended

[1] See http://www.health.alberta.ca/documents/IPC-Accountability-Reporting-2011.pdf

Our audit findings

Key findings

AHS did not adequately document its conversion tests or retain appropriate evidence to demonstrate that the project team:

- confirmed they brought all the data from the legacy system to the new system
- validated the accuracy of all data brought to the new system
- confirmed the new system processed the converted data as expected

AHS did not adequately map its data validation testing to the converted data.

The project team developed conversion design and strategy documents that guided the conversion team on what data to convert and provided technical information about the new data. The strategy required that the conversion team test the converted data, but did not detail how it would test the data or what evidence of the testing the team needed to retain for management review.

Based on the conversion strategy, the conversion team conducted data conversion tests, which included reconciling five pay cycles in a test version of the new system to the actual pay from the legacy system. During each cycle, the conversion team identified errors, made improvements and created a plan for the final cut-over from the old system to the new system. This plan included a number of data validation tests, but did not state that the team would test all the data for completeness and accuracy or that they would test all important system functions with the converted data.

For this audit, we requested lists of data extracted from the legacy system and of all the data being imported into the new system. We also asked for the testing document that explained how the validation and reconciliation tests related to the data, so that we could verify that data in the new system was accurate and complete. Project management provided us with the lists of data but did not have information on how the validation and reconciliation tests related to the converted data. Project management had to go back to the project team to obtain the information.

We asked to see the project team's evidence from the validation and reconciliation tests to confirm the converted data was properly tested. We found the project team did not consistently retain the evidence needed for project management review or audit. We saw evidence that members of the project team informed project management they had performed their assigned validation tasks assigned in the cut-over plan, but the project team did not provide any evidence they completed their assigned tasks to project management. Members of the project team told us that project management had instructed them to retain evidence, but had not provided them with direction on what evidence to retain for project management review or audit.

AHS's internal audit of the data conversion also found that the project team had not retained adequate evidence for its key conversion activities.

After it had sent out T4 and T4A slips for 2011, AHS found that ePeople had generated 5,800 reporting errors in these slips. None of the errors had an impact on employee pay. AHS sent revised slips to the affected employees. AHS also found that the year-end payroll data sent to Alberta Pensions Services Corporation (APSC) had 19,000 differences for which AHS data did not match APSC data.

Management's investigation found that most of the T4/T4A errors and the differences in the year-end data sent to APSC occurred as a result of the transition to ePeople. Management has designed additional tests to identify these errors during future data conversions. Management should have identified the risk of these errors by mapping the validation and reconciliation testing to the converted data. Had they done that, they might have identified the additional testing needed before the cut-over.

Implications and risks if recommendation not implemented

If AHS does not thoroughly test its converted data, there is a risk that errors in the converted data may result in errors in employee pay.

Payroll—accuracy monitoring activities

Background

AHS is moving its employees' payroll data onto one centralized human resource management system, called ePeople. The AHS Human Resources Shared Services branch, HRSS, is responsible for ensuring the accuracy of input of payroll changes in the ePeople system.

Payroll changes include overall changes to employee master files to reflect union agreements and to move employees from one pay increment to another. In addition to these changes, HRSS also makes about 8,000 changes per month for individual employees, such as changing their status from part-time to full-time, changing deductions or changing position levels.

Recommendation: Accuracy monitoring activities

23 RECOMMENDATION

We recommend that Alberta Health Services improve its monitoring activities to ensure the accuracy of transactions in its payroll system.

Criteria: the standards for our audit

An adequate system of automated and manual internal controls should be in place to mitigate the risk of incorrect changes to employee master files.

Our audit findings

Key findings

- There was inadequate documentation to demonstrate that data integrity queries are being run and results are properly followed up.
- The rationale for the sample size, the type of samples selected and procedures to follow when errors are detected was not documented.

HRSS has implemented controls over the overall changes to payroll, such as those resulting from amendments to union agreements or when employees move from one pay increment to another.

For other types of changes, HRSS has not implemented a manual control whereby each change entered by one employee is checked for completeness and accuracy by another employee. Instead, the ePeople system uses automated controls that check the accuracy of the other types of payroll and benefit data changes, and HRSS applies two detective controls after its employees enter the changes.

Four to six times each pay period, HRSS runs data integrity queries to identify incorrect or incomplete data for new or updated employee records so errors can be fixed. Monthly, they also select a random sample of 40 changes to the employee files (20 payroll related, 20 benefit related). Then they review the samples against authorized source documents to ensure the completeness and accuracy of input into ePeople.

We selected and reviewed 16 data integrity queries from 10 pay periods. We found:

- there was no checklist to demonstrate that all the queries had been run
- over 400 instances of where there was not documentation to show that exceptions detected by the queries were resolved by the end of the subsequent pay period. Some of the exceptions are not errors but instead instances where the circumstances for an individual employee differs from that of the general population. There was no documentation to differentiate the non-error exceptions from the errors. Such documentation would allow AHS to measure whether or not errors are being resolved on a timely basis
- that there was no clear documentation on how errors were corrected, by whom, if it was appropriate to correct these errors or not, and what testing was done to ensure the errors had been corrected

We also reviewed the monthly sample of changes to employee files and found:

- there was no documented rationale to demonstrate the sample size was sufficient to meet the test objective or that the samples picked were pro-rated for the actual quantity of each type of item within the population each month
- when an error was found, the sample size was not extended and no analysis or additional work was done to see whether the queries would have detected any additional errors in the monthly population
- there was no check to ensure the population being tested was complete and there was no documented deadline to ensure corrections occurred on a timely basis

Implications and risks if recommendation not implemented

If AHS does not monitor transactions to ensure the accuracy of its payroll system, it could make inappropriate changes to payroll, resulting in the over or underpayment of wages and benefits.

Accounts payable system—Goods received not invoiced listing

Background

AHS's accounts payable system (P2P) creates an automatic accrual when goods are received. When an invoice is received, this accrual is reversed and the invoice is paid.

At March 31, 2012, $124 million was accrued on the Goods Received Not Invoiced (GRNI) listing.

Recommendation: Accounts payable system—Goods received not invoiced listing

24 RECOMMENDATION

We recommend that Alberta Health Services complete its review of old amounts on the Goods Received Not Invoiced report to validate amounts or resolve issues as they arise before each year end.

Criteria: the standards for our audit

Accrued liabilities should be reviewed and appropriately supported.

Our audit findings

Key finding

The goods received but not invoiced account in accounts payable is difficult to review and has many old transactions that may contain errors.

At March 31, 2012, approximately $51 million of accruals on the list of goods received not invoiced were more than 90 days old. We noted management had started performing reviews of the account in December 2011; however, they had not analyzed all amounts by March 31, 2012.

There was $17 million of offsetting manual journal entries for these items. Management has not had their IT department update the report so these items still show on the report. This made the report extremely difficult to review, as many credit amounts were offset by debit amounts in another account.

By the end of our audit, management had examined a sample of transactions but had not determined the extent to which the net amount represented an error. Due to the nature of the account, it is possible the obligation to the vendor has been settled through a different process other than the matching of the purchase order, invoice and receiving document. Management has not determined whether the goods were actually received and not billed or whether there is a problem with the purchasing system and processes.

Applying the results of management's testing, we concluded that accounts payable and accrued liabilities were overstated by $14 million.

Implications and risks if recommendation not implemented

If AHS does not review old amounts on the GRNI list, there is a risk that accrued liabilities could be overstated.

Fees and charges

Background

The majority of patient services provided by AHS are not billed, as most individuals treated are Alberta residents who are receiving insured services.[2]

Legislation prescribes the types of goods and services that AHS may charge for. This includes charges for non-insured goods and services,[3] and charges for individuals who are not entitled to receive insured services. AHS inherited the admission and accounts receivable systems from the regional health authorities and boards that existed prior to the establishment of AHS. AHS has not yet converted to one system for admissions and accounts receivables.

Recommendation: Fees and charges

25 RECOMMENDATION

We recommend that Alberta Health Services:

- reinforce its admission policies to ensure consistent application
- review its controls over the processes that generates fees and charges revenue, to ensure they are appropriately designed, consistent across regions and aligned with current policies

Criteria: the standards for our audit

Controls in core businesses should be documented.

Our audit findings

Key findings

- AHS has multiple admission and accounts receivable systems.
- There is inconsistent documentation of the information flow between these systems and the controls.

[2] The *Alberta Health Care Insurance Act* and the *Hospitals Act* govern entitlement to health care insurance, and insured hospitalization benefits, respectively.

[3] See http://www.health.alberta.ca/AHCIP/what-is-not-covered.html for examples of services not covered by the Alberta Health Care Insurance Plan.

AHS and Alberta Health have jointly created an admissions policy that all admitting sites must follow. However, at AHS there is inconsistent understanding and documentation of the information flow, from the different patient admission sites through to the accounts receivable billing and collection.

We noted the existence of both automated and manual controls. However, there is still significant variability across the province on how information flows from admissions to accounts receivable to ensure appropriate amounts are billed and collected.

Due to the multiple legacy systems and processes, AHS still collects accounts receivable at individual sites. There has been limited centralization of billing, collections and consolidation of bank accounts.

Implications and risks if recommendation not implemented

If AHS employees do not fully understand admissions information flow, there is a risk of inappropriate billing.

Journal entry review process

Background

Alberta Health Services continues to consolidate diverse business applications from former regional health authorities into various centralized systems. The central general ledger is known as Oracle R12. This was the first full fiscal year under one centralized purchasing and payment system (P2P). Payroll was also partially centralized during the year.

Recommendation: Journal entry review process

26 RECOMMENDATION

We recommend that Alberta Health Services implement a recurring process to ensure significant and/or unusual journal entries are reviewed and approved appropriately.

Criteria: the standards for our audit

Journal entries should be appropriately supported and reviewed.

Our audit findings

Key finding

There is no formal recurring process to ensure significant and or unusual journal entries are reviewed and approved appropriately.

During our audit, we noted a significant number of journal entries processed in the current year. In addition to journal entries expected as part of the normal course of business, these entries included significant reclassifications and adjustments arising from system implementations.

AHS has a journal entry standard that provides guidance for the preparation, recording and approval of journal entries. However, we noted that management has not established a formal and recurring process to:

- ensure journal entries over a significant threshold or journal entries that are outside the normal course of operations are reviewed and approved appropriately
- involve the appropriate members of the financial reporting team to ensure the financial statement impact is appropriate

Implications and risks if recommendation not implemented

If management does not oversee significant or unusual journal entries, there is a risk that inappropriate or unsupported journal entries could be processed.

Matters from prior-year audits

Information technology control policies and processes—satisfactory progress

Background

In our *October 2009 Report* (no. 29—page 262), we recommended that Alberta Health Services:

- develop an information technology control framework, including appropriate risk management processes and controls, for the management of its information technology resources
- monitor compliance with security policies, implement effective change management processes and improve password controls

An IT control framework is a set of activities designed to mitigate risks and to ensure business objectives are met. It is the sum of all controls, processes and policies that enables management to know if information and information assets are being properly used so that the organization is:

- likely to achieve its objectives
- resilient enough to learn and adapt
- effectively managing risks

In July 2010, AHS launched an IT control framework project as part of its AHSecure program. The high-level objectives of the project were to create a control objectives framework model, perform a detailed assessment of the level of IT control maturity and increase awareness, understanding and knowledge transfer within IT.

Our audit findings

Overall, AHS has made satisfactory progress implementing an IT control framework. They have made progress developing their IT control framework and are completing work according to their plan. The plan consists of three phases:

1. IT controls maturity assessment (completed in 2010)
2. draft control framework tailored to AHS (approved October 25, 2011)
3. assess implementation of the controls and continuous improvement (scheduled for 2012)

AHS continues to improve the IT control environment, because a number of the weaknesses we identified through our audit are in legacy systems that AHS is currently working to replace. The control environments in the new systems are stronger and do not have the same weaknesses we found in prior audits.

We completed a review of the general computer controls at AHS as part of our financial statement audit. Through that review we were able to evaluate the design and effectiveness of controls currently implemented at AHS and conclude on what work remains for AHS to fully implement the recommendation. This report will focus on four key areas:

1. access control
2. security monitoring
3. change management
4. disaster recovery

Access controls
The consolidation of IT systems such as the provincial general ledger, procurement and human resources systems will allow AHS to centralize monitoring of controls over its most significant financial systems. To consolidate management of access controls for these systems, AHS is implementing an identity and access management system (IAM), with a target completion date of March 2013.

AHS's objectives for the IAM system are:
- compliance with audit and security requirements for access control and management
- IT administration efficiencies from automated user account administration and improved user account management mechanisms

In the legacy systems, we found inconsistent processes for:
- documenting requests for additions, transfers and terminations of user accounts
- reviewing access in critical business applications
- configuring appropriate password requirements

Security monitoring
AHS does not have documented processes for monitoring firewalls, system access attempts or failures, system usage or wireless access. To improve security monitoring, AHS has initiated a project to procure and implement a Security Incident and Event Management system with sufficient scalability to serve the needs of the entire organization. A SIEM system will collect and store security-related information from network devices, security devices and systems. The system will include a real-time analysis capability to identify and react to security events, and a mechanism for creating reports to facilitate compliance monitoring and investigation. AHS plans to be operational by December 2012.

Change management
AHS has formal change management procedures to oversee and manage its system changes at its various locations. The change management procedures require:
- authorization from the change advisory board for system, application and infrastructure changes
- controls to ensure business and IT management test changes before implementation in production
- approval from business area and IT management before implementation
- restricted access to implement changes

Implementation of these procedures was inconsistently documented across AHS for a number of the legacy systems that AHS plans to replace with the consolidated systems.

Disaster recovery
During our current audit, we found the following:
- Backups are performed; however, backup and restoration procedures have not been formally documented for all business systems.
- Backups are not periodically tested to ensure the integrity of the data and that financial systems can be recovered in the event of a disaster.
- Not all backup tapes are stored offsite.
- The offsite locations for storing backup media are not consistently assessed for security and environmental controls.

To fully implement this recommendation, AHS must complete the following projects:
- IT control framework
- identity and access management
- security and incident management

Implications and risks if recommendation not implemented

Inadequate and ineffective IT control processes and activities can lead to:
- confidential data being lost, improperly accessed, misused or disclosed
- implementation of systems or applications that do not work as expected or do not provide the expected benefits
- errors in the financial information not being detected and corrected

Supplementary retirement plans—implemented

Background

In our *October 2009 Report* (no. 28—page 260), we recommended that Alberta Health Services review existing supplementary retirement plans and:
- understand the terms and conditions for each plan
- develop clear and consistent policies and processes for administering them
- obtain actuarial valuations, using appropriate and consistent assumptions, for the plans
- understand the impact of funding options
- ensure sufficient funds are available to meet plan obligations

We made this recommendation when AHS became responsible for the defined benefit supplementary retirement plans that the former authorities had implemented.

Our audit findings

AHS has consolidated the oversight and administration of all defined benefit Supplemental Executive Retirement Plans and applied a consistent methodology to the actuarial valuation of the SERPs. As of March 31, 2012 the fair value of plan assets are greater than the obligations.

During 2012, the AHS Board approved amendments to the defined benefit SERPs which will freeze SERP service and earnings projections for all active plan members over a three-year period. Once individual plan members' SERP service accruals are frozen, these plan members will be enrolled and accrue benefits in the new defined contribution supplemental pension plan. This plan provides participants with an account balance at retirement based on the contributions made to the plan and investment income earned on the contributions.

Deferred contributions and deferred capital contributions—satisfactory progress

Background

In our *October 2010 Report* (no. 22—page 168), we recommended that Alberta Health Services implement consistent and efficient accounting processes for externally restricted contributions, to assure the Board that it is complying with the restrictions attached to those contributions. We previously made this recommendation because we found that AHS had made material errors in accounting for deferred contributions and deferred capital contributions. We also found AHS did not ensure unspent funds assigned to one project are applied to eligible expenses in another project.

Criteria: the standards for our audit

There should be consistent practices and processes of administering and accounting that ensure the balances reported for deferred contributions and deferred capital contributions are accurate.

Our audit findings

AHS has made the following improvements in the tracking and recording of restricted contributions:

- changed the tracking, recording and reporting of the restricted contributions so that reports are generated from central computer systems instead of from spreadsheets
- implemented a process to review and resolve debit balances that appeared to be over expenditures in deferred contributions and deferred capital contributions
- implemented a process to identify and track expiring contributions for deferred contributions

For this recommendation to be fully implemented, AHS needs to:

- perform a regular review of the deferred capital contributions so there is timely identification of errors in the deferred capital contribution account
    - AHS had an agreement where Alberta Infrastructure would reimburse AHS for furniture and equipment purchased in 2012 but did not identify until after year-end that there was $33 million of expenditures that they were entitled to reimbursement for.
    - We found two errors, amounting to $12 million, where deferred capital contributions should not have been recorded and a $9 million error where deferred capital contributions should not have been recorded as reduced. We also found another error amounting to $4 million where unspent funds were not applied against eligible project expenditures.
- develop a more timely process to seek approvals for extending expiring grants with funders—We found two cases where AHS continues to spend funds out of grants that have expired but has not yet received approval that the grants will be extended.
- confirm with Alberta Health whether the prior year grants from the former health regions have been spent and reported on—We identified $20 million of deferred capital contributions that AHS should further investigate to determine whether it has already reported the contribution to Alberta Health as being spent.

Implications and risks if recommendation not implemented

If AHS does not implement regular review processes, deferred contributions or deferred capital contributions could be misstated.

International and Intergovernmental Relations

Summary

Department

The Department has implemented our October 2008 recommendation to obtain assurance that information technology controls have been implemented at its international offices. The Department formalized an IT risk and control framework for the international offices, implemented a secured data transmission system to protect information that is shared between the offices and the Alberta Government, and obtained assurance from the federal Department of Foreign Affairs and International Trade (DFAIT) that IT security policies and control procedures are in place at the co-located offices—see below.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from prior-year audits

International offices IT recommendations—implemented

Background

In our *October 2008 Report* (page 326), we recommended the Department of International and Intergovernmental Relations obtain assurance that information technology controls have been implemented at its international offices. Alberta has 10 international offices responsible for advancing Alberta's advocacy, trade promotion, investment attraction and other interests. Seven of the 10 offices[1] are co-located in Canadian embassies operated by the federal Department of Foreign Affairs and International Trade. The remaining three offices stand alone, operated by the Department.

Our audit findings

The Department has implemented this recommendation. The Department worked with its international office staff and DFAIT to obtain reasonable assurance that appropriate information security controls are in place to protect information systems at its international offices.

IT risk assessment, policies and security controls

The Department adopted the Government of Alberta's Information Security Management Directives as its IT risk and control framework for the international offices. It conducted risk assessments for all international offices in 2011, to identify risks and the required IT controls to mitigate risks.

The Department obtained DFAIT's information security policies and procedures, to ensure they align with the Government of Alberta standards. To further demonstrate security measures are in place at the DFAIT offices, DFAIT also provided a letter to the Department to assure it has conducted internal testing and gone through accreditation to ensure security controls comply with its policies and procedures.

Secure data transmission

The Department developed IT control procedures for transmitting sensitive information between its international offices and the Department, replacing the practice of sending such information insecurely by fax or email. In 2011, it implemented a secured data transmission system that provides access to a secured method to upload and retrieve information being shared with the international offices. The system resides in the Department's data centre. Access credentials to the system are managed by the Department.

[1] The seven offices co-located with DFAIT are in Beijing, China; Taipei, Taiwan; Seoul, South Korea; Mexico City, Mexico; Munich, Germany; London, United Kingdom and Washington, USA. The three stand-alone offices are in Tokyo, Japan; Hong Kong, China, and Shanghai, China.

Municipal Affairs

Summary

Department

The Department of Municipal Affairs has:

- implemented our November 2011 recommendation to clarify its method for initially estimating disaster recovery expense—see below
- implemented our October 2008 recommendation to assess the effect on greenhouse gas emissions of the energy savings that resulted from the projects funded by the Department's ME first! Program and report the lessons learned—see page 132
- made satisfactory progress implementing our October 2009 recommendation that the Department improve its management of the disaster recovery program—see page 132

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Matters from prior-year audits

Disaster recovery expense estimates—implemented

Our audit findings

The Department has implemented our *November 2011 Report* (no. 18—page 124) recommendation to clarify its method for initially estimating disaster recovery expenses.

The Department's initial estimates of total costs related to disaster programs, particularly larger scale disasters with significant infrastructure damage, have a high degree of measurement uncertainty. In 2012, we observed that the Department used more accurate and timely information than it had previously. For example, the Department:

- based its estimates of residential claims on estimates claim specialists made shortly after the disaster, rather than estimating $5,000 per claim as it had previously done
- based its estimates of municipal claims on estimates from the municipalities, verified by claim specialists and engineers—The exception was the Slave Lake wildfire program, for which the Department applied a more conservative general estimate of total cost, due to the size and complexity of the disaster. Studies are underway to more accurately estimate the extent and costs of damage.
- simplified municipal cost estimates by removing individual adjustments for factors such as inflation and incorporating those factors into the general contingency for unknown costs
- reduced the general contingency on individual projects to 10 per cent of the original cost estimate based on historical contingencies required. The exception was the Slave Lake wildfire, for which the Department initially applied a 20 per cent contingency due to the unusual extent of damage.

ME first! Program—implemented

Our audit findings

The Department implemented our *October 2008 Report* (no. 37—page 335) recommendation to assess the effect on greenhouse gas emissions of the energy savings that resulted from the projects funded by the Department's ME first! Program and that the Department report the lessons learned from this program to the departments involved in creating climate change programs.

The Department developed a reasonable process to follow up on the outstanding projects and report when completed. During the year, we noted:

- of the original 84 projects funded under the program, seven projects were incomplete at the start of the year—Of these, four were completed or nearly completed by the end of the fiscal year. The Department expects the remaining three projects to be completed in 2013–2014.
- on completion of all projects, the Department will issue a Lessons Learned document that will include a recalculation of the total energy savings realized from the program.

Disaster recovery program—satisfactory progress

Background

In our *October 2009 Report* (page 301), we recommended that the Department improve its management of the disaster recovery program by:

- setting timelines for key steps before federal government funding can be received
- periodically assessing and adjusting costs and recovery estimates based on current information

Our audit findings

During the year, we observed the following:

- Guidelines were adjusted requiring municipalities to submit claims within six months of a disaster to ensure the Department could meet federal funding application deadlines. The Department also set a deadline of five years to complete all projects, which is consistent with federal funding requirements.
- Generally, the Department does not reassess original cost estimates on municipal claims for the duration of the recovery project. Accruals on longer duration infrastructure recovery projects do not reflect more accurate information of the expected costs to complete based on past experience on the project to date. Larger recovery projects typically have a large initial contingency for unknown costs. If actual costs are not re-assessed after a reasonable period, the Department might overstate project costs.
- The Department monitored projects quarterly for payments made relative to accrued costs. However, it examined related administration costs less frequently. As a result, we found administration costs for certain projects were overstated.

We will consider this recommendation implemented when we observe a reasonable process for periodically assessing and adjusting cost estimates based on current information.

Service Alberta

Summary

We recommend that Service Alberta rank the significance of the findings it identifies at registry agencies and document its follow-up processes.

Service Alberta has implemented our recommendations to:
- allow client organizations assess its performance over centralized processing of transactions—see page 134
- improve its information technology service level management—see page 136

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Matters from the current audit

Registry agencies compliance

Background

In Alberta, independent contractors provide provincial registry services. Service Alberta outsources the services through a contract that requires registry agencies to follow Service Alberta's policies and applicable legislation. To ensure that registry agencies comply with its policies and legislation, Service Alberta's compliance and accountability unit carries out compliance reviews.

There are over 200 registry agencies in Alberta. Service Alberta plans to review all registry agencies at least once every three years. Each year, it selects a sample of agencies to review based on its risk assessment model. The model takes into account such factors as:
- whether a registry agency is new
- whether there was a significant number of findings it identified in previous years at the agency
- transaction volumes at the registry agency

If the compliance and accountability unit finds that the agency is not complying with Service Alberta's policies and applicable legislation, Service Alberta's agent support unit will follow up with the agency for resolution of the problem. Generally, the agency has 90 days to resolve the problem.

In previous years, the agent support unit followed up on the compliance and accountability unit's findings through in-person visits at the registry agencies. In 2011–2012, the agent support unit followed up either by in-person visits, phone, email or obtaining signed letters from the agencies stating that they had fixed the problem. To determine which agencies require in-person visits, the agent support unit considers the types, number and impact of findings it identified at the agencies, and whether the findings were new or repeated findings. The unit also considers its resources, and distance to travel to the agencies.

The agent support unit considers those agencies with repeated findings as high priority for follow-up. The unit also considers whether the agencies have valid reasons or circumstances that limit the ability of the agency to rectify the findings.

Recommendation: Ranking of non-compliances at registry agencies

27 RECOMMENDATION

We recommend that Service Alberta rank the significance of findings it identifies at registry agencies and document its follow-up process.

Criteria: the standards for our audit

Service Alberta should have a documented process in place to guide its follow-up on the significant findings that its compliance and accountability unit identifies at the registry agencies.

Our audit findings

Key finding

No documented process on how to follow up on significant findings at registry agencies.

In 2011–2012, we selected eight compliance review reports to test. For each sample, we reviewed the compliance and accountability unit's report and noted whether the agent support unit followed up on the findings. Of the eight samples we tested, one had no findings to follow up on; for three of the samples, the agent support unit followed up on the findings through in-person visits.

However, we noted that for four samples, the agent support unit followed up with the findings either by phoning the agencies or obtaining signed letters stating that they had fixed the problems instead of obtaining and corroborating evidence through in-person visits to confirm that these agencies had fixed the problems.

Currently, the agent support unit ranks the significance of the findings that compliance and accountability unit identifies at the registry agencies based on its experience and knowledge of the agencies. There is no documented process in place to guide the agent support unit on where it should focus the follow-up effort if resources are limited, or what should trigger the unit to escalate the issue to senior management for actions.

Implications and risks if recommendation not implemented

Non-compliance with government policies and legislation may exist at registry agencies if Service Alberta does not have an effective documented process to rank the significance of findings it identifies and to focus its follow-up work.

Matters from prior-year audits

Service Alberta's role as a central processor of transactions—implemented

Background

In our *October 2008 Report* (no. 38—page 345), we recommended that Service Alberta consider providing internal control assurance to client organizations on its centralized processing of transactions.

Service Alberta provides centralized financial transaction processing services to client organizations. Because these client organizations rely on Service Alberta's controls, they expect that Service Alberta has:

- well-documented business processes
- adequate risk assessments
- designed and implemented controls that are operating effectively to mitigate identified risks

However, Service Alberta management did not confirm to its client organizations that it met these responsibilities.

Our audit findings

Service Alberta worked with the Human Resources Directors Council, the Administrative Services Council, the Senior Financial Officers Council, and the Deputy Ministers Council to develop a plan to provide assurance over centralized processing of transactions. In 2008–2009, Service Alberta consulted with industry experts and with other jurisdictions engaged in the delivery of shared services. Based on those consultations, Service Alberta planned to implement the recommendation over a three-year period, and in conjunction with other government initiatives, provide assurance on internal controls over financial reporting to its client organizations.

Service Alberta also formed a cross-government committee to guide development of the plan to provide assurance over centralized processing of transactions. Committee members include Service Alberta's senior financial officer, SFOs from client organizations, members from the Government of Alberta's Controller Office and Corporate Internal Auditor Services.

Since 2008–2009, Service Alberta has:

- put in place a service level agreement (SLA) to standardize its pay and benefits services developed and presented an SLA template for accounts payable to the SFO Council
- completed process documentation for capital assets
- begun its process documentation for cash
- identified and categorized areas of control risks

In 2011–2012, we followed up on Service Alberta's progress. Management decided that instead of providing formal service assurance to its client organizations, it would develop service targets, and implement processes to report Service Alberta's performance. Management's rationale was that:

- Service Alberta is not a third-party service provider but a related party to its client organizations
- its non-standardized delivery model makes it difficult to define the boundaries for internal controls that reside solely within Service Alberta
- the cost of obtaining third-party assurance outweighs the benefits

We agree with management's rationale because the intent of our original recommendation was that client organizations should be able to assess Service Alberta's performance in order to rely on its service delivery.

We reviewed the service catalogue that Service Alberta rolled out for its centralized services. The services include categories of IT services, employee file and records administration services, financial services, fleet management, information management, office services and procurement services. Currently, the catalogue includes about 160 services with targets for each service. Service Alberta now has performance information to report if a client organization asks for the information.

We selected a sample of services from the catalogue and reviewed the reports that Service Alberta can produce if client organizations request them. We noted that the reports include actual performance results for the services that Service Alberta delivers. Client organizations can use the information to assess whether Service Alberta meets its service targets. We also noted that Service Alberta is developing an internal control framework for its shared services. This will help management in assessing risks and developing strategies to mitigate those risks.

With the agreed-upon performance targets incorporated in the service catalogue, and the processes in place to report on its performance, Service Alberta gives its client organizations the ability to monitor its performance. We conclude that with the service catalogue and the reporting process, Service Alberta has effectively implemented our recommendation.

IT service level agreements between Service Alberta and its client organizations—implemented

Background

In our *October 2007 Report* (vol. 2, no. 32—page 146), we recommended that Service Alberta, working with its client organizations, revise their information technology service level agreements to:

- ensure that the agreements are current and reflect information technology services provided
- clarify the level of services provided in each service category
- define the roles and responsibilities of each party

Service Alberta provides IT services to its client organizations. These services include IT security management, network management and application support for cross-government systems. Service Alberta enters into contracts with third-party vendors to provide these services.

Our audit findings

In 2008, Service Alberta revised its IT service level agreements with some client organizations to better define the services it provided.

In 2009, Service Alberta developed the Information Technology Service Catalogue.[1] The catalogue defined and clarified the IT services offered to client organizations. It included roles and responsibilities of Service Alberta's IT teams and the client organizations' IT teams, and the vendors contracted for the services. Client organizations can select the services that they need to support their operations. Service Alberta rolled out the catalogue in 2009 and further refined the content in 2010. It also introduced a new IT service bundle structure to group like services in bundles to better reflect the interdependencies of services that the various IT teams and the third-party vendors provide.

In 2011, Service Alberta implemented further improvements to monitor and report its IT services delivery to client organizations. It formalized an IT service management and reporting framework for government shared services to increase transparency on the tracking of service response and turnaround times, measure actual service attainments against targets, with improved reporting to client organizations as a key performance measurement.

There are three main areas of improvement in the IT service management framework that we reviewed during the audit:

- end-to-end service targets
- monitoring and analyses to measure service target attainment
- service measurement reporting

End-to-end service targets

Service Alberta refined the service catalogue by incorporating end-to-end service target levels for all critical services, organized by service bundle categories. The targets are used to monitor response times for service requests and incident/problem tickets.

Client organizations' system users phone the help desk or submit an electronic form to request IT services. If the help desk cannot handle the request or resolve the problem, the system generates a ticket that goes to the respective IT delivery team, which may involve one or more third-party vendors for resolution. Requests for computer changes and equipment moves, referred to as IMACs,[2] go directly to the IT team responsible for providing onsite services. The service catalogue sets response priorities based on criticality of services and factors in the service delivery targets. Because of the interdependencies of various IT teams and third-party vendors involved in responding to the service needs, the defined service targets reflect the entire end-to-end process of all parties involved.

1 Information technology (IT) Service Catalogue is a menu of IT services that each client organization can choose to receive. Services are bundled in like service categories with costs for each type of services.
2 IMAC – Install, move, add or change service request form

Monitoring and analyses to measure service target attainment
Service Alberta collects data on all service requests and problem tickets that the client organizations submit, and uses the information to evaluate its performance and the performance of its third-party vendors in achieving the established delivery service target levels.

Service Alberta measures actual performance against the specified service targets in the catalogue. This monitoring activity helps Service Alberta determine if:

- the vendors fail to achieve the service targets as required by their contracts
- it needs additional department resourcing or staff training
- it needs to adjust the end-to-end service target levels or vendor contract target levels to more accurately reflect achievable service levels goals

Service Alberta also uses surveys to assess client satisfaction with the services they receive, whether the established service targets are reasonable and acceptable to the client organizations, and whether the third-party contracts require adjustments.

Service measurement reporting
Service Alberta reports on its progress through the service delivery managers it assigns to the client organizations. The managers meet regularly with client organizations' IT management to discuss service delivery progress and issues. The organizations' chief information officers are members of the CIO Council. The Council meets regularly to discuss IT shared services.

Service Alberta provides its client organizations with monthly reports on the quantity and types of services provided, and delivery targets achieved. The reports include gaps where Service Alberta did not achieve the targets, problem areas that required attention, and the measures taken if it missed targets. Service Alberta also provides monthly operations reports, which include new and planned service offerings, to its client organizations.

The reporting is a process improvement and provides valuable information to client organizations on the nature of IT services they receive from Service Alberta and the service target results. At this time, the reporting is only an aggregate by service bundle. Reporting details by client organization is still evolving. However, this is an important step to set the foundation for providing information through the IT service delivery framework.

Overall, we conclude that Service Alberta, through the office of the corporate chief information officer, has implemented our recommendation by establishing a comprehensive end-to-end service level management and reporting framework.

Tourism, Parks and Recreation & Culture and Community Services

Summary

Departments

This recommendation was made to the former Department of Tourism, Parks, Recreation and Culture. Subsequent to our 2007 recommendation, the former departments were reorganized into the Departments of Tourism, Parks and Recreation and Culture and Community Services. The departments have a shared services arrangement for IT services. We followed up our 2007 recommendation at both departments. For the purposes of this report, we are reporting both recommendations under this section. Our October 2007 recommendation to document information technology service levels with service providers was implemented.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Computer control environment—implemented

Background

In our *October 2007 Report* (vol. 2, p. 172), we recommended that the Department of Tourism, Parks, Recreation and Culture work with Service Alberta to:

- document the services being provided and the control environment for information technology
- implement a process to ensure that Service Alberta consistently meets service level and security requirements
- provide evidence that control activities maintained by Service Alberta are operating effectively

Our audit findings

As the result of a policy change, Service Alberta has reduced the services it provides to the Departments. Service Alberta will complete the migration of the Departments' workstations and email to the Government of Alberta network, but will no longer support systems that are not on its network. Service Alberta has a draft service level agreement for shared IT servces that it currently offers.

The Departments have contracted other service providers to support the systems Service Alberta no longer supports. The Departments have contracts in place with those vendors, but it intends to move all its systems onto the network provided by the Department of Treasury Board and Finance. Once that transition is complete, we will assess the processes the Departments use to ensure that Treasury Board and Finance:

- documents its services and controls
- meets agreed upon service levels
- provides evidence that controls operate effectively

We consider this recommendation implemented. The Departments have contracts in place with its current vendors and have documented the services provided by Service Alberta, through the shared services catalogue.

Transportation

Summary

The Department of Transportation should:

- improve its processes to monitor access to the computer application it uses to manage contracted work for maintenance of the provincial highways—see next column
- implement a policy on vehicle use, with due regard for economy—see page 142

The Department implemented the recommendation we made in our *October 2004 Report* that it strenghten its processes to monitor its commercial and moter vehicle inspection programs—see page 143.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Matters from the current audit

Monitoring access and data entry to the Program Management Application

Background

Since 2007, the Department has used the Program Management Application module of the Transportation Infrastructure Management System to manage contracted work for maintenance of provincial highways. Payments for the nine months ended December 31, 2011 were approximately $300 million.

The system administrator enters contracts into the system. The contracts list bid-items, which are quantities and prices such as hourly rates for equipment. The system administrator also approves access to the program management application.

The Department assigns responsibility to Maintenance Contract Inspectors for reviewing contracted work and approving worksheets. Invoice amounts are based on work that Department employees create, review and approve within the application. Expenditure Officers approve payments to contractors.

Recommendation: Monitoring access and data entry to the Program Management Application

28 RECOMMENDATION

We recommend that the Department of Transportation improve its processes to monitor access and data entry to the computer application it uses to manage contracted work for maintenance of provincial highways.

Criteria: the standards for our audit

The Department should have processes to:

- grant and monitor access to the Program Management Application to ensure that staff have only the access they need to perform their work
- ensure that contract information entered into the application is complete, accurate and authorized

Our audit findings

Key finding

- The Department does not regularly monitor access to the Program Management Application.

We examined access to the Program Management Application to December 31, 2011 and concluded that the Department had not documented its process and had not monitored users' access to the application.

The Department requires monthly reviews of access to TIMS, but limits its review to checking that access is removed for terminated employees. The Department does not review the accounts of existing employees to check whether their access roles are consistent with their job descriptions.

In response to our request for the PMA policies and processes, management provided us with a user training manual from 2005 and indicated that the manual was its guideline. The manual establishes access to the system in a user matrix and states that only maintenance contract inspectors (MCI) can review and approve worksheets. We noted that there were staff who had access roles of both MCI and contract manager. This level of access does not properly segregate the duties of both roles.

MCIs had also delegated their roles to other staff. The training manual indicates that the Department can grant temporary access when an MCI is away due to illness, vacation or other absence. MCIs had delegated their role to a significant number of staff, with no end date. Some were contract managers, who approved a significant number of worksheets. Since contract managers can change contract terms, they should not also be able to approve the payment for the work.

We also examined the Department's process to ensure that contract bid items were accurate and complete. We were told that the system administrator entered the bid items and that there is no formal process to review this information for accuracy and completeness. We tested a sample of manually entered items and identified no errors. However, there are several contracts with hundreds of bid items.

Management has advised us that it is taking steps to improve the process. We will review management's implementation during our next audit cycle.

Implications and risks if recommendation not implemented

Without a documented process and clear segregation of duties, the Department may make inappropriate payments for the work or at prices that are not in accordance with contracts.

Vehicle use

Background

When we identify issues of economy during our audit work, we assess whether management has the policies or processes it needs to conduct its business with due regard for economy. In our audit of the Department's 2010–2011 financial statements, we identified that the Department did not require employees to use leased or government owned vehicles while conducting the Department's business. As a result, many employees were reimbursed more than $1,000 a month, for using their personal vehicles instead of government owned or leased vehicles.

Employees were reimbursed at the government's travel rate of $0.50 per kilometer and could receive a further $8.55 daily for adverse driving conditions, such as driving more than 10 kilometers on unpaved roads.

In May 2011, the Department provided us with a draft policy that, when implemented, would require employees to use government owned or leased vehicles if they were expected to drive more than 25,000 kilometers in a fiscal year. The Department estimated that it would save $450,000 annually by implementing its draft policy.

At March 31, 2012, the Department had not finalized its draft policy.

Recommendation: Vehicle use

29 RECOMMENDATION

We recommend that the Department of Transportation implement a policy about vehicle use, with due regard for economy.

Criteria: the standards for our audit

The Department should implement policies and processes that ensure that it conducts its business with due regard for economy.

Our audit findings

Key finding

- The opportunity to realize savings has been missed because of the delay in implementing a vehicle use policy.

We concluded that the Department's delay in establishing a policy was not reasonable. The Department, itself, had reported on travel expenses to its senior management in June 2010, but did not draft a policy until May 2011. As of June 2012 the policy had still not been implemented.

We reviewed the assumptions management made in establishing the threshold of 25,000 kilometers and concluded that the savings would be at least $450,000 annually.

Implications and risks if recommendation not implemented

The Department may incur unnecessary expenses that could have been used in other ways to better serve the Alberta public.

Matters from prior-year audits

Monitoring the commercial and motor vehicle inspection programs—implemented

Background

In our *October 2004 Report* (no. 29—page 301), we recommended that the Department strengthen its processes to monitor the commercial vehicle inspection program and the motor vehicle inspection program.

The Department requires that out-of-province vehicles and previously written-off vehicles be inspected before they can be licensed and that buses and commercial vehicles be inspected regularly. The Department outsources the inspections to private facilities. Both private inspection facilities and the technicians who perform the inspections must be licensed by the Department. The Department's vehicle safety investigators monitor the facilities and technicians to ensure that they do not pass vehicles that are unsafe.

We made the recommendation because the Department:

- had not documented policies and procedures for the inspection programs or expectations of the vehicle safety investigators, to enable them to perform their duties appropriately and consistently
- had not developed reporting that would enable senior management assess the effectiveness of its vehicle inspection programs

Our audit findings

The Department implemented the recommendation by:

- establishing policies and procedures for the inspection programs and expectations of the vehicle safety investigators
- establishing a mystery shopper program where Alberta Peace Officers, posing as customers, have vehicles inspected—The results of the inspection are communicated to the facility and the inspector and any necessary fines are administered.
- developing reports that provide management with:
  - significant issues
  - monthly and year-to-date results of the vehicle safety investigations, program administration and vehicle inspector activity
  - the annual results of the mystery shopper program, including recommendations on program improvements
  - the annual Alberta collision statistics, which senior management can use to target groups, or times of day with high collision rates

Treasury Board and Finance

Summary

Department

The Department of Treasury Board and Finance has implemented our recommendation to review all user access to business data to ensure that unauthorized changes are prevented and appropriate incident monitoring exists to ensure systems issues are promptly resolved—see page 146.

ATB Financial

We repeat one recommendation to ATB Financial to confirm the key controls in the new banking system are implemented and operate effectively—see page 148.

We have one new recommendation to ATB Financial to establish processes to monitor its compliance with the Payment Card Industry's requirements—see page 154.

We report that ATB Financial has implemented six recommendations related to:

- interest rate risk controls—see page 149
- updating investment and derivative policies—see page 149
- evaluating and updating its tools related to treasury information systems—see page 149
- expanding the role of the middle office to monitor interest rate risk and ensuring they have resources to monitor foreign exchange activities—see page 150
- internal controls over fair value calculations of securities and derivatives—see page 150
- IT governance and control—see page 150

We have also concluded there have been changed circumstances related to our internal controls recommendation to ATB from October 2009—see page 150.

Alberta Capital Finance Authority

We report that Alberta Capital Finance Authority has implemented our recommendation to secure additional skilled resources to help implement new required financial accounting standards and to ensure the cost-effective preparation and management review of its annual financial statements—see page 151.

Alberta Investment Management Corporation

We made one new recommendation to Alberta Investment Management Corporation to obtain third-party statements for all investments not held by external custodians and reconcile these statements to its records—see page 151.

We report that AIMCo has implemented two other recommendations related to:

- introducing a process to prepare the organization for internal control certification—see page 152
- strengthening information technology change management controls—see page 153

Alberta Gaming and Liquor Commission

We made one new recommendation to the Alberta Gaming and Liquor Commission to obtain sufficient information to comply with International Financial Reporting Standards disclosure requirements in its annual financial statements—see page 153.

We also report that AGLC has implemented our recommendation to develop an information technology risk and control framework—see page 154.

For outstanding previous recommendations to the organizations that form the Ministry, please see our outstanding recommendations list on page 159.

Findings and recommendations

Department

Matters from prior-year audits

User access—implemented

Our audit findings

The Department of Finance implemented our *October 2008 Report* recommendation (page 272) to review all user access to business data to ensure that unauthorized changes are prevented and appropriate incident monitoring exists to ensure systems issues are promptly resolved.

The Department:

- implemented user access monitoring through regular reviews and approvals
- implemented a network monitoring for files and folders
- ensured that network administrators were not accessing files and folders unless authorized

ATB Financial

Matters from prior-year audits

ATB implemented a new banking and accounting system in September 2011. This system replaced the legacy banking and accounting systems that were in use since the mid-1980s. The project transformed ATB's banking system, financial reporting system, and internet and telephone banking applications. ATB also re-engineered some of its business processes to take advantage of the new banking system's functionality. When the system went live in September 2011, ATB had spent approximately $360 million on the project.

What we examined

We assessed management's progress towards implementing our *November 2011 Report* recommendation that ATB Financial confirm that the key controls in the new banking system, as identified in its risk and control matrices, are implemented and operate effectively.

As part of our audit of ATB's March 31, 2012 financial statements, we updated our understanding of, and tested, the business processes and internal controls that we rely on to express an opinion on ATB's financial statements. We also audited the key manual processes that ATB had put in place to prepare its financial statements because certain processes in the new banking system were not working as they should.

Our audit work covered activities within ATB's new banking system up to May 2012.

Why it is important to Albertans

ATB provides financial services to over 635,000 customers in approximately 242 communities and has over $31 billion in assets. ATB's profits belong to all Albertans, along with the risk of loss because the Government of Alberta provides a deposit guarantee to all ATB depositors. Because of the deposit guarantee of $25 billion at March 31, 2012, Albertans have a significant stake in ATB's financial success and how well ATB manages its financial risks. Therefore, it is critical ATB's management and its Board of Directors have processes in place to satisfy themselves that key internal controls are well-designed, implemented and operating effectively.

What we found

Internal controls in the new banking system

In response to our *November 2011 Report* recommendation, ATB committed to testing the operating effectiveness of the key controls in the new banking system within six to nine months after go-live. Since we made our recommendation, ATB has walked through the processes supporting the key controls in the new banking system, performed some transaction testing and has voluntarily begun a program to comply with Canadian Securities Administrators' standards around internal controls over financial reporting. However as of May 2012, the testing of the operating effectiveness of the controls has not occurred.

Therefore, we have repeated our recommendation. We believe this is too long for ATB to operate post go-live without confirmation that key internal controls in the new banking system are operating effectively. Management is now targeting to complete its assessment of the operating effectiveness of the key controls in the new banking system by August 2013.

Findings from our financial statement audit

When the new banking system went live in September 2011, there were certain processes that impacted ATB's financial reporting that were not working as intended. ATB is working on fixing these items. To prepare its financial statements and run its business, ATB had to put in place manual or alternative processes to deal with these items. Because of this, ATB is not yet fully optimizing the benefits from the functionality and capabilities of the new banking and accounting system. We highlight below some of the key areas that have been affected.

The general ledger is not complete and accurate without manual adjustments

We observed that not all transactional data from the banking service module is being accurately and completely flowed through to the general ledger. ATB uses the data in its general ledger to prepare its financial statements. The banking services module contains customer loan and deposit balances and transactional data. Management had to manually adjust the general ledger to the balances in the banking services module because certain transactions are not able to flow through properly. The main cause of this issue was the components of the system (the bank analyzer module and an associated technical data layer [ETL module]) that sits in between the banking services module and the general ledger was not configured properly.

Management is working on a project plan, which is expected to be finalized in December 2012, to upgrade and reconfigure the bank analyzer and ETL modules. The remediation project is expected to take between 12 and 18 months to complete. Until the project is complete, management will continue to need to manually adjust the general ledger. This method is an inefficient way to create financial statements and is more prone to error. For example, in the third quarter of 2012 management used a query to measure interest expense. The wrong query was used initially resulting in interest expense being incorrect by $9 million. This error delayed the release of the third quarter financial statements while management reviewed and fixed the data query.

ATB is not yet optimizing the integration between its banking and accounting system because of the configuration problems that require ATB to use inefficient and potentially ineffective manual processes.

Need for timely and accurate information

ATB needs timely and accurate information to run its business. The business case for the new banking system stated that management would receive better reporting than they had with the old banking system. Management is not getting timely and accurate information from its new banking system in several key areas. Although the new system has the potential to provide better information, a lot of these reports that management needs to use were not accurate or did not work properly. Management is still designing and testing some of the reports that lines of business need to run their day-to-day activities.

Loan impairment improperly identified

The process for identifying impaired loans in the new banking system is not working properly. The new banking system is putting loans into an impaired status that should not be impaired. This has required management to perform a time-intensive process to examine all loans to determine if they are truly impaired.

Segregation of duties not configured properly

Our audit work also identified that employees can access and post banking transactions to their own bank account. The access controls in the new banking system have not been configured properly to prevent this from happening. The potential for inappropriate transactions increases if employees can access and post transactions to their own bank accounts and if the monitoring controls are not in place.

New banking system internal controls

Background

In our *November 2011 Report* (page 102), we recommended that ATB Financial confirm that the key controls in the new banking system, as identified in its risk and control matrices, are implemented and operate effectively.

We are repeating this recommendation because management's new targeted completion date of August 2013 is too long to wait to obtain confirmation that the key internal controls in the new banking system are operating effectively.

Recommendation: New banking system internal controls—repeated

30 RECOMMENDATION

We again recommend that ATB Financial confirm that the key controls in the new banking system, as identified in the risk and control matrices, are implemented and operate effectively.

Criteria: the standards for our audit

ATB should have effective processes to enable the CEO and CFO to assert to the Audit Committee that key internal controls in the new banking system are well-designed, implemented and operating effectively.

Our audit finding

Key finding

ATB is taking too long to ensure that controls are operating effectively in the new banking system.

Management agreed with our 2011 recommendation and committed to completing the testing of operating effectiveness of the key controls in the new banking system within six to nine months after go-live. Since go-live, ATB has walked through the processes supporting the key controls in the new banking system, performed some transaction testing and has voluntarily begun a program to comply with Canadian Securities Administrators' standards around internal controls over financial reporting. However, as of May 2012, the testing of the operating effectiveness of the controls has not occurred.

The planned completion date of an operating effectiveness assessment is now August 2013. In our view this is too long and puts ATB at risk if its internal controls are ineffective for this extended period of time.

Implications and risks if recommendation not implemented

Management and the Audit Committee are relying on key controls that have not yet been confirmed to be implemented and operating effectively.

Matters from the current audit

Payment Card Industry

Background

ATB is an issuer and provider of MasterCard credit cards. MasterCard and other credit card companies formed the Payment Card Industry Security Standards Council (PCI) to ensure entities issue credit cards and acquire payments securely. This group established 12 data security standards to protect credit card issuers against unauthorized use and fraud with credit cards.[1]

The standards identify technical and operational requirements to protect cardholder data. They apply to all entities involved in payment card processing—including merchants, processors, acquirers, issuers and service providers, as well as all other entities that store, process or transmit cardholder data.

1 Payment Card Industry (PCI) Security Standard Council, 2012

The 12 standards are minimum requirements for protecting cardholder data; individual entities add controls and practices to further mitigate risks.

MasterCard, as a member of PCI, can set its own financial and other penalties for non-compliance with the standards—including revoking the right to issue cards or use the MasterCard name.

Recommendation: Payment Card Industry

31 RECOMMENDATION

We recommend that ATB Financial put in place processes to monitor its compliance with the Payment Card Industry's requirements.

Criteria: the standards for our audit

ATB should have processes in place to monitor its compliance with the payment card industry's security standards.

Our audit finding

Key finding

ATB cannot demonstrate it is in compliance with PCI requirements.

ATB is unable to demonstrate that it complies with PCI's 12 data security standards. ATB has started a working group to complete a gap analysis on ATB's existing practices and PCI's requirements.

Implications and risks if recommendation not implemented

If ATB is found to be in non-compliance with PCI's data security standards, it could be assessed financial penalties, lose reputation as a credit card provider, and lose its ability to be a MasterCard issuer and acquirer.

Matters from prior-year audits

Interest rate risk controls—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 136) to introduce controls to ensure consistent measurement of interest rate risk by:

- creating individual user login accounts for access to the system that calculates interest rate risk exposure
- designing a checklist to ensure that data and assumptions have been entered correctly into the interest rate risk system
- reconciling balance sheet data to the interest rate risk system to ensure the completeness and accuracy of data used

Treasury policies—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 139) to implement updated investment and derivative policies for changes arising from its recent review of those policies and to review the financial risk management policy.

ATB did this by improving its treasury related policies and ensuring they are updated and approved on a regular basis. Specifically, it:

- made distinct policies for corporate and client derivatives
- rectified the weaknesses we noted in the policies
- outlined the roles and responsibilities of management, the Asset Liability Committee and the Board of Directors

Treasury information systems—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 138) to:

- evaluate its current treasury information systems against its business requirements
- develop and implement a treasury information technology plan to upgrade its tools

Management developed a roadmap for its treasury systems and this was approved by ATB's Asset Liability Committee. ATB evaluated its various treasury system options, including a treasury module from the vendor of its new banking system. ATB determined its best option was to upgrade its existing derivative and investment system and then have it feed directly into the new banking system.

Role and use of middle office—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 137) to:

- expand the role of its middle office (now Market Risk) area to include responsibilities for monitoring interest rate risk
- ensure that middle office has the necessary resources to monitor foreign exchange activities and fulfill its other responsibilities

ATB did this by moving the responsibility to monitor interest rate risk to the Market Risk area. It also ensured that sufficient resources are available for Market Risk to monitor interest rate and foreign exchange risks.

Internal controls over fair value calculations of securities and derivatives—implemented

Our audit findings

ATB implemented our *October 2008 Report* recommendation (page 274) repeated in our *October 2010 Report* (page 153), to improve controls over the calculations of fair value for its derivatives and securities. It did this by creating a process to compare its derivative valuations against valuations done by a third-party and investigating any significant differences.

ATB also improved its internal controls by minimizing the amount of manual inputs into its information system. The system now obtains direct feeds from third-party data providers.

IT Governance—implemented

In our *October 2009 Report* (page 222), we recommended that ATB improve the efficiency and effectiveness of its computing environment by developing a process to ensure all ATB business units adopt and follow an organization-wide information technology governance and control framework.

Our audit findings

ATB implemented this recommendation by creating an IT governance and control framework that is being followed within its computing environment.

Internal Controls—changed circumstances

Background

In our *October 2009 Report* (page 221), we recommended that the Core project Strategic Steering Committee receive the appropriate assurance from the project leadership team that the organization's control objectives have been satisfied before the user acceptance testing phase of the project is complete.

In our *November 2011 Report* (page 102), we made a new recommendation to ATB to confirm that the key controls in the new banking system are implemented and operate effectively. Management told us that they would test the operating effectiveness of the banking systems internal controls within six to nine months after the go-live date of the banking system.

Therefore, we will no longer follow up our *October 2009 Report* recommendation.

Alberta Capital Finance Authority Matters from prior-year audits

Additional skilled resources required—implemented

Background

In our *April 2009 Report* (page 103), we recommended that management secure additional skilled resources to help implement new required financial accounting standards and to ensure the cost-effective preparation and management review of its annual financial statements.

ACFA underwent significant changes to its financial reporting framework in 2011, moving from part V of the Canadian Institute of Chartered Accountants Handbook to standards issued by Public Sector Accounting Board. In the same period, the president retired and was replaced. The previous president was a designated accountant who carried out some of the key financial reporting functions. The new president does not have an accounting background, requiring ACFA to make other arrangements to prepare its financial statements.

Our audit findings

ACFA responded to these transitional changes by making arrangements with the Department of Finance to provide additional accounting support, as well as hiring a designated accountant. These actions, along with significant audit involvement, helped ensure ACFA was able to transition to the new standards and meet its tight year-end reporting timeline. As this transition is a one-time event, we expect that management will be able to meet its financial reporting needs with less audit involvement in the future.

Alberta Investment Management Corporation Matters from the current audit

Securities reconciliation

Background

On a daily basis, AIMCo reconciles the investments recorded in its records for equity and fixed income investments to the records of external custodians, to ensure that there are no unrecorded investments. Differences between AIMCo's records and those of custodians are reported on a "Reconcilable Differences Report." Most, but not all, investments are held by external custodians.

Recommendation: Securities reconciliation

32 RECOMMENDATION

We recommend that Alberta Investment Management Corporation obtain third-party statements for all investments not held by external custodians and reconcile its records to those statements.

Criteria: the standards for our audit

AIMCo should follow up on all investments listed on the "Reconcilable Difference Report" to ensure that the investments are accurately recorded.

Our audit findings

Key findings

- Some identified differences were not followed up on.
- An investee issued stock dividends in each of the last two years that were not recorded by AIMCo.

We reviewed the Reconcilable Differences Report at September 30, 2011 and identified several instances where AIMCo did not follow up on investments that were not reconciled to external custodian records.

We obtained copies of third-party statements for the largest unreconciled investment and found that the investee company had issued stock dividends in each of the last two years, which had not been recorded by AIMCo. As a result, the fair value of the investment was understated by $14.8 million at December 31, 2011 and a total of $14.8 million in investment income had not been recorded for the two-year period ending December 31, 2011. AIMCo corrected the error as of December 31, 2011.

Implications and risks if recommendation not implemented

All investments held by AIMCo may not be accurately recorded in its records if they are not regularly reconciled to external custodians and third-party statements.

Matters from prior-year audits

Getting ready for internal control certification—implemented

Background

In our October *2008 Report* (no. 32—page 282), we recommended that AIMCo introduce a process to get the organization ready for internal control certification by:

- ensuring that the strategic plan of the organization includes internal control certification
- developing a top-down, risk-based process for internal control design
- selecting an appropriate internal control risk assessment framework
- considering sub-certification processes, whereby direct reports to the CEO, COO and CFO provide formal certification on their areas of responsibility
- ensuring that the management compensation systems incorporate the requirement for good internal control
- using a phased approach for assessing the design and operating effectiveness of internal controls

Our audit findings

In 2009, management developed a plan to get AIMCo ready for internal control certification. Internal control certification was a business plan goal in 2009, 2010 and 2011–2012. AIMCo planned to obtain external service auditor control certification, in accordance with the requirements of CICA Handbook Section 5970, rather than internal sub-certification.[2] The organization would follow a phased approach, first obtaining Type 1 certification to assess whether suitable controls were in place to address key risks and if the identified controls were suitably designed. The next phase would be to obtain Type 2 certification to assess whether the identified controls were operating effectively throughout a suitable period.

The plan was supported by senior management and members of the AIMCo Board.

In 2009, AIMCo reviewed and documented its internal controls. It developed and implemented new controls where it found the existing controls to need improvement. Management engaged external service auditors to provide an opinion on whether the controls were suitably designed and were working on December 15, 2009.[3] The service auditor's report included a discussion of weaknesses in AIMCo's control design.

In 2010, AIMCo took action to remediate the control weaknesses identified by the service auditors. Early in 2011, AIMCo believed it was ready for Type 2 certification and engaged the service auditors to provide an opinion on whether controls were operating effectively from June 1 to November 30, 2011.

2 The opinion was prepared in accordance with the assurance standards of Section 5970 of the Canadian Institute of Chartered Accountants Handbook, which has two variants. CICA 5970 Type 1 reports only on suitability of control design at a point in time. Type 2 reports on design suitability and operating effectiveness over six months.

3 The opinion was prepared in accordance with the assurance standards of Section 5970 of the Canadian Institute of Chartered Accountants Handbook.

The service auditors concluded that the controls identified by AIMCo were in place at November 30, 2011, were suitably designed and operating effectively from June 1 to November 30, 2011, except for one control related to securities lending. The ineffective securities lending control did not have a material impact on investment cost, fair value or income reported for investment participants.

We believe that the actions taken by management and the favorable opinion provided by the service auditors are sufficient evidence to conclude that the recommendation is implemented.

Change management—implemented

Our audit findings

In our *October 2010 Report* (page 158), we recommended that AIMCo strengthen its IT change management controls to ensure that it adequately assesses the risks of changes and does not make changes outside of its change management process.

AIMCo implemented this recommendation by introducing a change management system that assigns risk levels to changes and tracks those changes through to completion.

Alberta Gaming and Liquor Commission

Improve the quality of employee benefits note disclosure in the financial statements

Background

AGLC participates in three defined benefit pension plans.[4] The plans are Public Service Pension Plan, Management Employee Pension Plan and Supplemental Retirement Plans for Public Service Managers. These multi-employer plans provide retirement benefits to employees of participating employers, which include the Government of Alberta, universities, public colleges, provincial corporations and government boards, agencies and commissions.

Before 2011–2012, AGLC prepared financial statements using Canadian generally accepted accounting principles (GAAP). AGLC accounted for its participation in the multi-employer plans as if they were defined contribution plans. The employer contributions to those plans were recorded as expenses under salaries and employee benefits in the statement of operations.

In 2012, AGLC prepared its financial statements for the first time in accordance with IFRS. The IFRS criteria for accounting for defined benefit plans differ from Canadian GAAP criteria. IFRS requires AGLC to account for its participation in the three multi-employer plans as defined benefit plans unless there is not enough information available.

[4] A defined benefit plan provides plan members with a predetermined level of pension income when they retire—the exact level depends on variables such as income and years of plan membership—and employer sponsors tend to assume a large proportion of the risk of meeting that benefit. This contrasts with defined contribution plans, where the employer and employee contributions are defined (often as a fixed percentage of employee income), and employees typically assume most of the risk in achieving a certain level of pension income. For defined contribution plans, benefits are determined as a function of accumulated contributions.

In practice, defined benefit plans present a more complex level of accounting because organizations must use actuarial techniques and assumptions to measure the pension obligation and the associated expenses. The actuarial valuation involves assumptions about factors such as discount rates, expected rates of return on assets, future salary increases, mortality rates and future pension increases. The IFRS accounting standard for employee benefits requires organizations to account for its proportionate share of multi-employer pension plans' defined benefit obligations, plan assets and associated costs when sufficient information is available. The explanatory notes and disclosures are integral to a complete set of financial statements, as they help readers interpret the financial information.

At March 31, 2012, AGLC's balance sheet recorded $40.7 million as the obligation for its proportionate share of net defined benefit obligations for three multi-employer plans. AGLC hired an actuary to measure its proportionate share of pension obligations under the three plans. In addition, throughout the IFRS transition, AGLC management sought advice from a consultant to help management make key decisions on IFRS policy choices, interpret and apply the new standards.

Recommendation: Improve quality of employee benefits note disclosure in financial statements

33 RECOMMENDATION

We recommend that management of the Alberta Gaming and Liquor Commission obtain sufficient information to ensure compliance with International Financial Reporting Standards for disclosures in the employee benefit plans note in its annual financial statements.

Criteria: the standards for our audit

AGLC's financial statements and supporting notes should be prepared with complete disclosures to comply with IFRS.

Our audit findings

Key findings

- Employee benefits note did not meet all the requirements of the IFRS standard.
- AGLC's actuary did not have enough time to gather information for financial statement disclosures.

Although AGLC correctly measured and recorded its pension obligations using defined benefit accounting principles, it did not include all the disclosures required under the employee benefits standard. Management asserted that they did not have the necessary information to present disclosures in accordance with IFRS because their actuary did not have enough time to prepare the final actuarial assessments. They informed the readers of their March 31, 2012 financial statements of the deficiencies in the disclosures for employee benefits.

Based on advice from their consultant, management's initial conclusion was to continue to use defined contribution accounting for the multi-employer pension plans. Their view was that IFRS permits the use of defined contribution accounting where insufficient information was available to apply defined benefit accounting. Management supported their position with a letter from the plans' pension administrator that stated that they cannot provide the necessary information. We disagreed with this conclusion and held the view that AGLC could have estimated its proportionate share of plans with the help of an actuary. We found that other organizations participating in the same multi-employer plans had found ways to calculate their share of the pension obligations.

At the closeout stage of the audit, management revised their conclusion and hired the pension plans' actuary to measure AGLC's proportionate share of the plans using defined benefit accounting standards. The actuary calculated the proportionate share of the pension obligations, but did not have enough time to complete the detailed assessment needed to allow AGLC management to prepare IFRS-compliant notes for its Board-approved financial statements.

The key deficiencies in AGLC's note on the multi-employer pension plans were as follows:

- Although the value of the pension expense was disclosed, management was unable to properly allocate expense amounts between the current year pension expenses and the loss on pension liability reflected in Other Comprehensive Income (Loss) within the Statement of Operations because management did not have the proper information sourced from actuarial assessments to compute the current year pension expense using defined benefit accounting standards. AGLC did not have information to calculate and disclose the elements that constitute the pension expense such as current service cost, interest cost, expected return on plan assets and actuarial gains and losses. On an overall basis, the Statement of Operations reflected the aggregate costs associated with the multi-employer pension plans.
- Disclosures missing for each pension plan were:
    - change in the present value of the defined benefit obligations from beginning to end of the reporting year, categorized by current service cost, interest expense, re-measurement gains or losses, and benefit payments
    - change in the fair value of the plans' assets from the beginning to end of the reporting year, categorized by employer contributions, interest income, re-measurement gains or losses, and benefit payments
    - net pension liability representing the difference between AGLC's defined benefit obligations and its share of the fair value of the plans' assets

Implications and risks if recommendation not implemented

Without complete disclosures, users of AGLC's financial statements may not understand the risks and exposures surrounding the multi-employer pension plans.

Matters from prior-year audits

IT control framework and risk assessment—implemented

Background

In our *October 2008 Report* (pages 52 and 351), we reported that Alberta Gaming and Liquor Commission should develop an information technology risk and control framework, to identify and mitigate IT risks and improve its controls over information technology. AGLC was one of nine organizations that received this recommendation, along with the Ministry of Service Alberta.

In 2011, AGLC expanded the scope of its IT risk and control framework plans to include two preliminary steps:

- improving IT service delivery
- enhancing and modernizing its IT capabilities

Although this expanded scope delayed the original plans and timeline, AGLC decided that these improvements were critical to the success of its framework.

Our audit findings

We followed up on the progress AGLC made this year to further design and implement a formalized risk and control framework. AGLC adopted COBIT[5] as its risk and control standard and adopted some components of the COSO[6] risk management framework.

Management did the following key tasks this year, to further design and implement the IT risk and control framework:

- prepared an IT risk strategy to define a framework scope, methodology, expected outcomes, timeline and resource requirements
- hired an external consultant with expertise in risk management planning, to assist with the framework's development
- defined an IT risk registry that is linked to the enterprise risk framework through business impact statements
- conducted a risk assessment on each risk in the registry, identifying likelihood, risk level (high, medium or low), inherent risk or residual risk and mitigating controls
- identified the COBIT control procedures for each IT risk defined in the risk registry
- designed and implemented IT policies and control procedures for high risk IT areas such as change management, user access and IT security
- involved business, IT and internal audit representatives in the framework development process—Workshops were used to validate risks, define mitigating controls and assess business impacts.

Overall, AGLC has designed and implemented a comprehensive IT risk and control framework. We verified that AGLC has implemented key controls to mitigate high risk IT services; therefore, we assessed this recommendation as implemented.

5 Control Objectives for Information and Related Technology (COBIT)
6 Committee of Sponsoring Organizations of the Treadway Commission (COSO), www.coso.org

AUDITOR GENERAL
Alberta

Outstanding Recommendations

Report of the Auditor General of Alberta—October 2012

Outstanding Recommendations

This list of outstanding recommendations is organized alphabetically by ministry. Each section includes outstanding recommendations for a ministry and the entities that report to it. We list outstanding recommendations under the entity that is responsible for its implementation. Where recommendations have been made to more than one entity, they appear more than once in the list. We have amended the wording of past recommendations to reflect the changes to ministry names and responsibilities announced by government on May 8, 2012.

Our outstanding recommendations list includes new recommendations in this report as well as those from previous reports that we have not yet reported as implemented. These recommendations include the following categories:

- **Numbered**—require a formal public response from the government. When implemented, these recommendations will significantly improve the safety and welfare of Albertans, the security and use of the province’s resources, or governance and ethics processes in government.
- **Unnumbered**—in previous reports some recommendations were unnumbered; although important, these recommendations do not require a formal public response from government.

Each section in this list has two parts, indicating where management has informed us that either:

- the recommendation is still being implemented and not ready for a follow-up audit, or
- the recommendation has been implemented and is ready for a follow-up audit

Recommendations in each section are identified by a “🔑” if they were key recommendations, and by a “**3+**” for numbered recommendations that have been outstanding for three years or more. Although we recognize that some recommendations will take longer to implement, we encourage management to implement our key and numbered recommendations within three years. We confirm implementation of recommendations by conducting follow-up audits.

We currently have 233 outstanding recommendations —165 numbered and 68 unnumbered:

	Numbered		Unnumbered	Total
	3+	Other		
Ready for follow-up audits	25	21	38	**84**
Not yet ready for follow-up audits	30	89	30	**149**
Total	**55**	**110**	**68**	**233**

The reports that contain these recommendations are on our website at www.oag.ab.ca.

Aboriginal Relations

Department

There are no outstanding recommendations for this entity.

Agriculture and Rural Development

Department

The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Reporting and dealing with allegations of employee misconduct—November 2006, no. 12, p. 46**
We recommend that the Department of Agriculture and Rural Development improve its systems for reporting and dealing with allegations of employee misconduct.

Enterprise risk management—October 2012, no. 12, p. 85
We recommend that the Department of Agriculture and Rural Development improve its risk management processes.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Food safety: Alberta Agriculture's surveillance program—October 2006, no. 9, vol. 1, p. 88**
We recommend that the Department of Agriculture and Rural Development improve the administration of its food safety surveillance program. This includes:

- documenting its prioritization processes
- involving partners in the prioritization of projects
- ensuring conditions for the approval of specific projects are met and final approval recorded
- capturing costs for large projects
- monitoring the impact of surveillance projects
- considering whether regulatory support for the program is required

Food safety: Alberta Agriculture's food safety information systems—October 2006, vol. 1, p. 94
We recommend that the Department of Agriculture and Rural Development improve its food safety information systems. This includes:

- improving security and access controls
- ensuring complete, timely, and consistent data collection, and
- ensuring data gets onto the computerized data base

Agriculture and Rural Development and Health

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Food safety: Integrated food safety planning and activities—October 2009, no. 11 , p. 107 (repeated once since October 2006)**
We again recommend that the Departments of Health and Agriculture and Rural Development, in cooperation with Alberta Health Services and federal regulators, improve planning and coordination of food safety activities and initiatives. This includes:

- each provincial ministry defining its own food safety policies, objectives and measures (satisfactory progress)
- coordinating provincial food safety policies and planning so initiatives are integrated (satisfactory progress)
- ensuring provincial approaches align with initiatives being developed through federal/provincial/territorial committees (satisfactory progress)
- improving day-to-day coordination of provincial food safety activities
- encouraging the joint application of HACCP and HACCP related programs in Alberta , and (satisfactory progress)
- improving cooperation and working relationships among provincial and federal partners such as the First Nations and Inuit Health Branch and the Canadian Food Inspection Agency

3+ **Food safety: Accountability—October 2009, no. 13, p. 114 (repeated once since October 2006)**
We again recommend that the Departments of Health and Agriculture and Rural Development improve reporting on food safety in Alberta.

Agriculture and Rural Development, Health and Alberta Health Services

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

3+ **Food safety: Eliminating gaps in food safety inspection coverage—October 2009, no. 12, p. 111 (repeated once since October 2006)**

We again recommend that Alberta Health Services and the Departments of Health and Agriculture and Rural Development, working with federal regulators, eliminate the existing gaps in food safety coverage in Alberta. Gaps include:

- mobile butchers
- consistently administering the *Meat Facility Standard*
- coordinating inspections in the "non-federally registered" sector

Agriculture Financial Services Corporation

The following recommendation is outstanding and not yet ready for a follow-up audit:

AgriStability accrual process—November 2011, no. 9, p. 75

We recommend that the Agriculture Financial Services Corporation ensure its procedures to develop the AgriStability accrual are properly documented and reviewed.

Alberta Livestock and Meat Agency Ltd.

There are no outstanding recommendations for this entity.

Culture

Ministry

There are no outstanding recommendations for this entity.

Education

Ministry and Department

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

School board budget process—October 2006, no. 25, vol. 2, p. 65

We recommend that Alberta Education improve the school board budget process by:

3+
- providing school boards as early as possible with the information needed to prepare their budgets (e.g. estimates of operating grant increases and new grant funding, and comments on financial condition evident from their latest audited financial statements)
- requiring school boards to use realistic assumptions for planned activities and their costs and to disclose key budget assumptions to their trustees and the Ministry
- establishing a date for each school board to give the Ministry a trustee-approved revised budget based on actual enrolment and prior year actual results
- reassessing when and how the Ministry should take action to prevent a school board from incurring an accumulated operating deficit

School board interim reporting—October 2006, no. 26, vol. 2, p. 68

We recommend that Alberta Education work with key stakeholder associations to set minimum standards for the
3+ financial monitoring information provided to school board trustees.

We also recommend that Alberta Education work with the key stakeholder associations to provide information to trustees about:

- the characteristics of a strong budgetary control system
- best practices for fulfilling financial monitoring responsibilities

Consolidation processes—November 2011, no. 12, p. 81

We recommend that the Department of Education improve its processes to consolidate the financial information of school jurisdictions into the Ministry of Education's financial statements.

Northland School Division No. 61

The following recommendation is outstanding and not yet ready for a follow-up audit:

Obtaining an interest in land—October 2010, no. 13, p. 133
We recommend that Northland School Division No. 61 develop processes to ensure it obtains a valid legal interest in land before beginning construction of schools.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improving financial reporting—October 2010, no. 14, p. 134
We recommend that the Northland School Division No. 16 improve its financial reporting by:
- preparing and presenting quarterly financial information to the Official Trustee
- regularly reviewing and reconciling general ledger accounts
- preparing year-end financial statements promptly

Energy

Department

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve controls over royalty adjustments note disclosure—October 2012, no. 13, p. 95
We recommend that the Department of Energy improve its controls over the completeness and accuracy of royalty information disclosed in the financial statements

Ensuring compliance with terms of bioenergy grant agreements—October 2012, no. 14, p. 96
We recommend that the Department of Energy ensure that recipients under the bioenergy producer credit program are complying with their grant agreements.

Improving processes to recognize royalty revenue estimates in the financial statements—October 2012, no. 15, p. 97
(repeated once since November 2011)
We again recommend that the Department of Energy improve its controls to ensure consistent application of methodology used to calculate bitumen royalty estimates.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Royalty review systems: Improving annual performance measures—October 2007, no. 11, vol. 1, p. 124**
We recommend that the Department of Energy improve its annual performance measures that indicate royalty regime results.

3+ **Alberta's bioenergy programs—October 2008, no. 25, p. 255**
We recommend that the Department of Energy:
- undertake and document its analysis to quantify the environmental benefits of potential bioenergy technologies to be supported in Alberta
- establish adherence to the *Nine-Point Bioenergy Plan* as a criterion within its bioenergy project review protocol, and require grant applications to indicate the projected environmental benefits of proposed projects
- prior to awarding grants in support of plant construction, require successful applicants to quantify—with a life cycle assessment—the positive environmental impact relative to comparable non-renewable energy products

Energy Resources Conservation Board

There are no outstanding recommendations for this entity.

Enterprise and Advanced Education

Department

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve financial reporting processes—October 2012, no. 16, p. 100
We recommend that the Department of Enterprise and Advanced Education improve its financial reporting processes by:
- training staff on the policies, processes and controls related to preparing the financial statements
- improving its monitoring and review processes to ensure accuracy of the financial information
- reducing its reliance on manual processes, to increase the efficiency and accuracy of financial reporting

Resolve outstanding sector accounting issues—October 2012, no. 17, p. 101
We recommend that the Department of Enterprise and Advanced Education work with the Office of the Controller and institutions to develop a process for efficient resolution of accounting issues in the post-secondary sector.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Non-credit programs: Standards and expectations—April 2008, no. 1, p. 22**
We recommend that the Department of Enterprise and Advanced Education:
- clarify its standards and expectations for non-credit programs and clearly communicate them to public post-secondary institutions
- work with institutions to improve the consistency of information that institutions report to the Department

3+ **Non-credit programs: Monitoring—April 2008, no. 2, p. 23**
We recommend that the Department of Enterprise and Advanced Education implement effective processes to:
- monitor whether institutions report information consistent with its expectations
- investigate and resolve cases where institutions' program delivery is inconsistent with its standards and expectations

Cross-Institution recommendations: Enterprise risk management—April 2010, no. 17, p. 158
We recommend that the Department of Enterprise and Advanced Education (through the Campus Alberta Strategic Directions Committee) work with post-secondary institutions to identify best practices and develop guidance for them to implement effective enterprise risk management systems.

Alberta College of Art and Design

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve risk management systems—March 2012, no. 3, p. 19
We recommend that the Alberta College of Art and Design:
- finalize its enterprise risk management framework document
- periodically update and manage the framework as it identifies new potential risks and opportunities
- enforce compliance with its risk management policy by requiring the president and CEO to
- periodically report the risks and mitigating strategies to the board

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Information technology internal controls—October 2007, vol. 2, p. 21
We recommend that the Alberta College of Art and Design strengthen internal controls for computer system access and server backups. We further recommend that the College develop a computer use policy.

Preserving endowment assets—April 2009, p. 78
We recommend that Alberta College of Art and Design define its goals for the use and preservation of the economic value of endowment assets (inflation proofing).

Periodic financial reporting—April 2010, p. 160
(repeated once since April 2008)
We again recommend that Alberta College of Art and Design improve its processes and controls to increase efficiency, completeness and accuracy of financial reporting.

Journal entries—April 2010, p. 183
We recommend that Alberta College of Art and Design:
- ensure journal entries entered into the financial system are independently reviewed and approved
- develop a policy that defines the process for recording and approving journal entries and the documentation required to support the entry

Code of conduct, conflict of interest and fraud policies—April 2011, p. 72
We recommend that Alberta College of Art and Design:
- develop, implement and enforce policies for code of conduct and conflict of interest
- develop and implement a fraud policy that clearly defines actions, responsibilities, authority levels and reporting lines in case of fraud allegations

Controls over vendor master file set-up and maintenance—April 2011, p. 73
We recommend that Alberta College of Art and Design improve its controls over the set-up, maintenance and monitoring of its vendor master list.

Alberta Innovates—Technology Futures

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve project management governance and controls for new information systems—November 2011, no. 4, p. 65

We recommend that Alberta Innovates—Technology Futures improve its governance practices for the Corporate Information Systems project, by:

- establishing formal project management policies, processes, standards and controls for the Corporate Information System project
- establishing a project steering committee comprised of key stakeholders
- documenting and communicating the roles and responsibilities for all stakeholders, including the steering committee, board sub-committee and project sponsors
- updating the business case to set out the project's objectives that enables the steering committee to monitor and measure the project's progress
- formally assessing the impact of the project on other strategic business initiatives and periodically updating the assessment

Athabasca University

The following recommendations are outstanding and not yet ready for follow-up audits:

Information technology governance, strategic planning and project management: Improve governance and oversight of information technology—October 2010, no. 1, p. 21

We recommend that Athabasca University continue to improve its information technology governance by:

- developing an integrated information technology delivery plan that aligns with the University's information technology strategic plan
- requiring business cases for information technology projects that include key project information such as objectives, costs-benefit assessments, risks and resource requirements to support the steering committees' and executive committee's decisions and ongoing project oversight
- improving the coordination and communication between the information technology steering committees in reviewing, approving and overseeing projects

Information technology governance, strategic planning and project management: Improve portfolio and project management processes—October 2010, no. 2, p. 24

We recommend that Athabasca University continue to improve its portfolio management and project management processes for information technology projects by:

- clarifying and communicating the mandate and authority of the project management office
- setting project management and architectural standards, processes and methodologies, and training project managers on these
- monitoring and enforcing project managers' adherence to these standards, processes and methodologies
- tracking and managing project dependencies on scope, risks, budgets and resource requirements

Information technology governance, strategic planning and project management: Formalize information technology project performance monitoring and reporting—October 2010, p. 25

We recommend that Athabasca University formalize and improve its monitoring and oversight of information technology projects by:

- improving its systems to quantify and record internal project costs
- providing relevant and sufficient project status information to the information technology steering and executive committees, and summarized project information to the Athabasca University Governing Council Audit Committee
- completing post-implementation reviews on projects to verify that expected objectives and benefits were met and identify possible improvements to information technology governance, strategic planning and project management processes

Information technology governance, strategic planning and project management: Resolve inefficiencies in financial, human resources and payroll systems—October 2010, p. 27

We recommend that Athabasca University complete its plans to resolve the inefficiencies in its financial, human resources and payroll systems.

Establish information technology resumption capabilities—October 2010, no. 10, p. 111

We recommend that Athabasca University:

- assess the risks and take the necessary steps to establish appropriate offsite disaster recovery facilities that include required computer infrastructure to provide continuity of critical information technology systems
- complete and test its existing disaster recovery plan to ensure continuous services are provided in the event of a disaster

Implement enterprise risk management systems—October 2012, no. 18, p. 107
We recommend that Athabasca University implement an effective risk management system.

Improve conflict of interest procedures—October 2012, no. 19, p. 108
We recommend that Athabasca University update its policy and procedures, and implement a process for staff to annually disclose potential conflicts of interest in writing so the University can manage the conflicts proactively.

Grant MacEwan University

The following recommendations are outstanding and not yet ready for follow-up audits:

Systems over costs for internal working sessions and hosting guests—April 2010, p. 165
We recommend that Grant MacEwan University:
- implement policies and guidance on appropriate expenses for events related to internal working sessions and for hosting guests
- follow its policies and processes for employee expense claims and corporate credit cards

Preserve endowment assets—April 2010, p. 170
We recommend that Grant MacEwan University improve its endowment and related investment policies and procedures by:
- establishing and regularly reviewing a spending policy for endowments
- improving its processes to review its endowment related investments
- improving its reporting of investments and endowments to the audit and finance committee

Improve and implement University policies—April 2010, no. 18, p. 174
We recommend that Grant MacEwan University improve its control environment by implementing or improving:
- a code of conduct and ethics policy and a process for staff to acknowledge they will adhere to its policies
- a process for staff to annually disclose potential conflicts of interest in writing so the University can manage them proactively
- a safe disclosure policy and procedure to allow staff to report incidents of suspected or actual frauds or irregularities
- a responsibility statement in its annual report to acknowledge management's role in maintaining an effective control environment

Improve financial business processes—March 2012, no. 1, p. 13
We recommend that Grant MacEwan University improve its financial business processes by:
- establishing clearly documented processes and controls
- developing clear roles and responsibilities and communicating these to staff
- training staff on the policies, processes and controls relating to their roles and responsibilities
- implementing monitoring and review processes to ensure staff follow the policies, processes and controls

Improve security of PeopleSoft computer system—March 2012, no. 2, p. 15
We recommend that Grant MacEwan University improve the security of its PeopleSoft system to ensure that the university:
- uses the system to assign access permissions based on job roles, and properly limit access
- defines, monitors and enforces rules for segregation of duties
- authorizes and reviews logs of critical data changes
- provides appropriate oversight to maintain the integrity of security controls

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Capital assets—April 2009, p. 85
We recommend that Grant MacEwan University improve its capital asset processes by:
- documenting its assessment on the appropriate accounting treatment for costs related to construction and renovation projects
- coding and recording transactions accurately the first time

Adhere to signing authority limits—April 2010, p. 176
We recommend that Grant MacEwan University improve its processes to ensure appropriate staff with proper signing authority approve contracts and purchases.

3+ **Ensure contracts are signed before work begins—April 2011, no. 3, p. 75**
(repeated once since November 2006)
We again recommend that Grant MacEwan University have signed contracts (interim or final) in place before projects start.

Keyano College

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Access controls to key financial systems—April 2011, p. 77

We recommend that Keyano College improve access control policies and processes for its information systems to ensure that:

- user access to networks and application systems is disabled when employees leave their employment
- user access to computer networks and systems is properly authorized and all staff and contractors comply with the computer use policy

Monitor access to key financial systems—April 2011, p. 78

We recommend that Keyano College develop a policy and processes for monitoring and investigating breaches of security to its information systems.

Improve processes to secure its servers—March 2012, no. 10, p. 29

We recommend that Keyano College ensure all its servers are secure, with up-to-date anti-virus security and software upgrades

Lakeland College

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Improve controls for staff to formally acknowledge code of conduct—April 2011, p. 79

We recommend that Lakeland College enhance its code of conduct processes and require all employees to reconfirm compliance with the code of conduct regularly.

Review and approve manual journal entries—March 2012, no. 11, p. 30

We recommend that Lakeland College ensure proper review and approval of all manual journal entries.

Medicine Hat College

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve enterprise risk management systems—March 2012, no. 12, p. 31

We recommend that Medicine Hat College improve its risk assessment process by:

- documenting its assessment of risks for their impact and likelihood of occurrence
- prioritizing the key risks and clearly linking those risks to a program, operational plan or procedures designed to manage and monitor those risks
- formally reporting the key risks and mitigating actions to the board

NorQuest College

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve financial internal controls—March 2012, No. 4, p. 22

We recommend that NorQuest College improve its internal controls in the key areas of reconciliation of financial information, approval of invoice payments, review of journal entries and documentation of these controls.

Improve quality control over year-end financial information—March 2012, no. 7, p. 25

We recommend that NorQuest College improve its quality control processes for preparing its year-end financial information, to improve efficiency and accuracy.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Bookstore services: Segregation of duties in the bookstore—April 2010, p. 186

We recommend that NorQuest College implement proper segregation of duties within its bookstore services.

Improve controls over contracts—March 2012, no. 5, p. 23

We recommend that NorQuest College improve its controls over contract management.

Improve controls over donations—March 2012, no. 6, p. 24

We recommend that NorQuest College improve its processes to manage donations.

Olds College

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve periodic financial reporting—March 2012, no. 8, p. 27
(repeated once since April 2011)

We again recommend that Olds College improve its processes and controls over year-end financial reporting.

Restrict privileged access to appropriate staff—March 2012, no. 9, p. 28
We recommend that Olds College segregate privileged systems access from data entry responsibilities and business functions.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve internal controls—April 2011, p. 81
(repeated once since April 2010)
We again recommend that Olds College improve internal controls in the bookstore relating to sales and inventories.

Portage College

The following recommendations are outstanding and not yet ready for follow-up audits:

Follow access controls and remove access promptly—March 2012, no. 13, p. 32
We recommend that Portage College ensure that employees follow its system user-access control procedures and that management promptly removes access privileges when staff leave.

Develop and test a business resumption plan—March 2012, no. 14, p. 33
We recommend that Portage College fully develop and test a business resumption plan to ensure that it can resume IT services in a reasonable time after a disaster.

Improve controls over bookstore inventory—March 2012, no. 15, p. 34
(repeated once since April 2011)
We again recommend that Portage College improve the accuracy of its perpetual inventory system at the bookstore.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve periodic financial reporting—April 2011, p. 68
(repeated once since April 2010)
We again recommend that Portage College improve its financial reporting to its board and senior management by providing—at least quarterly—complete financial statements of financial position and actual year-to-date operating results.

Red Deer College

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Systems over costs for internal working sessions and hosting guests—April 2010, p. 167
We recommend that Red Deer College:

- implement policies and guidance on appropriate expenses for internal working sessions and hosting guests
- strengthen its processes to ensure staff follows its policies and processes for employee expense claims and corporate credit cards

University of Alberta

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve controls over bookstore inventory—October 2012, no. 20, p. 110
We recommend that the University of Alberta:

- improve its controls to value the bookstore's inventory
- develop policies and processes to identify obsolete inventory in its bookstores and in storage
- develop processes to regularly review the cost of goods it holds in inventory

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Strategic planning for research—October 2004, p. 252
We recommend that the University of Alberta improve the integration of research into its strategic business plan by ensuring that:

- key performance measures and targets are identified with each strategy indicated in the plan
- the costs of achieving these targets are considered when making budget allocation decisions
- the faculty and other research administrative unit plans set out in clear, consistent terms, the extent to which faculties and units are planning to contribute to the achievement of these targets

Systems over costs for internal working sessions and hosting guests—April 2010, p. 167
We recommend that the University of Alberta follow its policies and processes for employee expense claims and corporate credit cards.

University of Calgary

The following recommendations are outstanding and not yet ready for follow-up audits:

Enterprise risk management—November 2011, no. 5, p. 67
We recommend that the University of Calgary adopt an integrated risk management approach to identify and manage the risks that impact the University as a whole.

Improve IT change management controls—November 2011, no. 6, p. 67
We recommend that the University of Calgary implement:
- an organization-wide IT change management policy with supporting procedures and standards
- processes to ensure the policy is consistently followed throughout the organization

Secure access to its PeopleSoft system—November 2011, no. 7, p. 68
We recommend that the University of Calgary ensure access to its PeopleSoft system is secured and meets the University's security standards.

Remove users' access privileges promptly—October 2012, no. 21, p. 112
We recommend that the University of Calgary:
- define an acceptable timeframe to disable or remove users from the application and the network
- document, communicate and consistently follow a process to deactivate users from the University's information technology systems within the defined timeframe

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Research management: Planning for research capacity—October 2010, no. 4, p. 46 (repeated once since October 2004)**
We again recommend that the University of Calgary improve its human resources plans and develop a system to quantify and budget for the indirect costs of research.

3+ **Research management: Define research management roles and responsibilities—October 2010, no. 5, p. 48 (repeated once since October 2005)**
We again recommend that the University of Calgary define research management roles and responsibilities.

3+ **Research management: Research policies—October 2010, no. 6, p. 50 (repeated once since October 2005)**
We again recommend that the University of Calgary ensure all research policies are current and comprehensive. Specifically, the policies should identify who is responsible for monitoring compliance.

Research management: Project management—October 2010, p. 52 (repeated once since October 2005)
We again recommend that the University of Calgary and its faculties use project management tools for large, complex projects to ensure research is cost effective.

University of Lethbridge

The following recommendation is outstanding and not yet ready for a follow-up audit:

3+ **Information technology internal control framework—October 2007, no. 21, vol. 2, p. 23**
We recommend that the University of Lethbridge implement an information technology control framework.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Clear and complete research policies—October 2008, p. 227
We recommend that the University of Lethbridge improve systems to ensure that:
- financial research policies are current and comprehensive
- proper documentation is maintained for approving research accounts
- researchers, research administrators and financial services staff are aware of changes to financial policies and are properly trained to comply with the policies

Environment and Sustainable Resource Development

Ministry and Department

The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Drinking water: Information systems—October 2006, no. 4, vol. 1, p. 52**

We recommend that the Department of Environment and Sustainable Resource Development improve the information systems used to manage its drinking water businesses by:

- updating the Environmental Management System forms and improving reporting capacity
- coordinating regional, district, and personal information systems to avoid overlap and encourage best practice, and
- using data to improve program effectiveness and efficiency

3+ **Climate change: Planning—October 2008, no. 9, p. 97**

We recommend that the Ministry of Environment and Sustainable Resource Development improve Alberta's response to climate change by:

- establishing overall criteria for selecting climate-change actions
- creating and maintaining a master implementation plan for the actions necessary to meet the emissions-intensity target for 2020 and the emissions-reduction target for 2050
- corroborating—through modeling or other analysis—that the actions chosen by the Ministry result in Alberta being on track for achieving its targets for 2020 and 2050

3+ **Climate change: Monitoring processes—October 2008, no. 10, p. 100**

We recommend that for each major action in the *2008 Climate Change Strategy*, the Ministry of Environment and Sustainable Resource Development evaluate the action's effect in achieving Alberta's climate change goals.

Climate change: Guidance to verifiers of facility baseline and compliance reports—October 2009, no. 3, p. 42

We recommend that the Department of Environment and Sustainable Resource Development strengthen its baseline and compliance guidance for verifiers by improving the description of the requirements for:

- the nature and extent of testing required
- the content of verification reports
- assurance competencies

Climate change: Data quality—October 2009, p. 40

We recommend that the Department of Environment and Sustainable Resource Development strengthen its guidance for baseline and compliance reporting by:

- clarifying when uncertainty calculations must be done
- prescribing the minimum required quality standards for data in terms of minimum required frequency of measurement and connection to the period being reported on
- describing the types of data controls that facilities should have in place

Climate change: Outsourced service providers—October 2009, p. 49

We recommend that the Department of Environment and Sustainable Resource Development develop controls to gain assurance that data hosted or processed by third parties is complete accurate and secure.

We also recommend that the Department of Environment and Sustainable Resource Development formalize its agreement with its service provider for the Alberta Emissions Offset Registry.

Climate change: Cost-effectiveness of regulatory processes—October 2009, no. 5, p. 51

We recommend that the Department of Environment and Sustainable Resource Development assess the cost-effectiveness of the *Specified Gas Emitters Regulation*.

3+ **Financial security for land disturbances—October 2009, no. 23, p. 207 (repeated two times since October 1999)**

We again recommend that the Department of Environment and Sustainable Resource Development implement a system for obtaining sufficient financial security to ensure parties complete the conservation and reclamation activity that the Department regulates.

Managing Alberta's Water Supply: Backlog of Water Act applications—April 2010, no. 4, p. 65

We recommend that the Department of Environment and Sustainable Resource Development minimize the backlog of outstanding applications for *Water Act* licences and approvals.

Managing Alberta's Water Supply: Assessing compliance with the Water Act—April 2010, no. 5, p. 68
We recommend that the Department of Environment and Sustainable Resource Development ensure its controls provide adequate assurance that performance in the field by licence and approval holders as well as others complies with the *Water Act*.

Managing Alberta's Water Supply: Wetland compensation—April 2010, no. 6, p. 71
We recommend that the Department of Environment and Sustainable Resource Development formalize its wetland compensation relationships and control procedures.

Climate change: Clarify guidance—November 2011, no. 1, p. 15
(repeated once since October 2009)
We again recommend the Department of Environment and Sustainable Resource Development clarify the guidance it provides to facilities, verifiers, offset project developers and offset protocol developers, to ensure they consistently follow the requirements in place to achieve the Alberta government's emissions reduction targets.

Climate change: Ensure all protocols meet new standard, and improve transparency —November 2011, no. 2, p. 21
We recommend the Department of Environment and Sustainable Resource Development implement processes to ensure that all approved protocols adhere to its protocol development standard.

We also recommend the Department of Environment and Sustainable Resource Development improve its transparency by making key information about how protocols are developed publicly available.

3+ **Climate change: Public reporting—October 2012, no. 10, p. 38**
(repeated once since October 2008)
We again recommend that the Ministry of Environment and Sustainable Resource Development improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Controls over revenue—October 2008, no. 39, p. 355**
We recommend that the Department of Environment and Sustainable Resource Development put processes in place to allow significant revenues currently recorded when cash is received to be recorded when revenue is due to the Crown.

3+ **Sand and gravel: Enforcement of reclamation obligations—October 2008, no. 40, p. 360**
We recommend that the Department of Environment and Sustainable Resource Development improve processes for inspecting aggregate holdings on public land and enforcing land reclamation requirements.

3+ **Sand and gravel: Flat fee security deposit—October 2008, no. 41, p. 362**
We recommend that the Department of Environment and Sustainable Resource Development assess the sufficiency of security deposits collected under agreements to complete reclamation requirements.

Sand and gravel: Quantity of aggregate removed—October 2008, p. 364
We recommend that the Department of Environment and Sustainable Resource Development develop systems to verify quantities of aggregate reported as removed by industry from public lands so that all revenue due to the Crown can be assessed and recorded in the financial statements.

Sand and gravel: Information management—October 2008, p. 366
We recommend that the Department of Environment and Sustainable Resource Development capture and consolidate information throughout the life of an aggregate holding and use it to test compliance with legal obligations.

Climate change: Technical review—October 2009, p. 45
We recommend that the Department of Environment and Sustainable Resource Development strengthen its technical review processes by:

- requiring facilities to provide a process map with their compliance reporting and
- ensuring staff document their follow-up activity and decisions in the Department's regulatory database

Managing Alberta's Water Supply: Watershed Planning and Advisory Councils grants and contracts—April 2010, no. 7, p. 73
We recommend that the Department of Environment and Sustainable Resource Development strengthen its control of grants and contracts with Watershed Planning and Advisory Councils.

Natural Resources Conservation Board

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Compliance and enforcement (Confined feeding operations)—October 2007, no. 34, vol. 2, p. 167 (repeated once since October 2004)

3+ We again recommend that the Natural Resources Conservation Board rank its compliance and enforcement activities based on risk. To do so, the Board must:

- Define through research the environmental risks applicable to CFOs and their impact
- Categorize CFOs by priority levels of environmental risk at different locations
- Conduct appropriate sampling and testing to confirm the validity of assigned risk levels
- Select and deliver appropriate compliance and enforcement action

Surface water risks—April 2011, no. 2, p. 59

We recommend that the Natural Resources Conservation Board demonstrate that its compliance approach is adequate in proactively managing surface water risks.

Executive Council

The following recommendation is outstanding and not yet ready for a follow-up audit:

Assess risk and improve oversight—October 2012, no. 11, p. 62

We recommend that Executive Council:

- assess the risks to public information assets throughout the government
- determine if the government has adequate IT security policies, standards and controls to mitigate risks
- determine who is responsible and accountable to ensure that public information assets are adequately protected. Specifically:
  - who is responsible for monitoring compliance with IT security requirements
  - who is responsible for ensuring or enforcing compliance with security requirements
  - what actions should be taken when non-compliance is identified
  - how is compliance to security requirements demonstrated

Health

Ministry and Department

The following recommendations are outstanding and not yet ready for follow-up audits:

Department's accountability for the PCN program—July 2012, no. 5, p. 35

We recommend that the Department of Health:

- establish clear expectations and targets for each of the PCN program objectives
- develop systems to evaluate and report performance of the PCN program

Engagement and accountability to PCN patients—July 2012, no. 7, p. 42

We recommend that the Department of Health proactively inform Albertans which Primary Care Network they have been assigned to, and what services are available through their PCN.

Centralized support by the Department—July 2012, no. 8, p. 43

We recommend that the Department of Health improve its systems to provide information and support to help Primary Care Networks and Alberta Health Services achieve PCN program objectives.

Department's systems to oversee PCNs—July 2012, no. 9, p. 48

We recommend that the Department of Health improve its systems for oversight of Primary Care Networks by:

- obtaining assurance that PCNs are complying with the financial and operating policies of the PCN program
- ensuring PCN surplus funds are used in a timely and sustainable manner.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

3+ **Seniors care: Effectiveness of services in long-term care facilities—October 2005, no. 8, p. 59**

We recommend that the Department of Health collect sufficient information about facility costs from Alberta Health Services and long-term care facilities to make accommodation rate and funding decisions.

3+ **Implementing the Provincial Mental Health Plan—The accountability framework—April 2008, no. 4, p. 77**

We recommend that the Department of Health ensure there is a complete accountability framework for the *Provincial Mental Health Plan* and mental health services in Alberta.

Electronic health records: Project management—October 2009, no. 7, p. 75

We recommend the Department of Health execute publicly funded electronic health record projects and initiatives in accordance with established project management standards.

Electronic health records: Monitoring the electronic health records—October 2009, no. 8, p. 78
We recommend the Department of Health proactively monitor access to the portal (Netcare), through which the electronic health records can be viewed, reviewing it for potential attacks, breaches and system anomalies.

Electronic health records: User access management—October 2009, p. 80
We recommend that the Department of Health ensure that its user access management policies are followed and that user access to health information is removed when access privileges are no longer required.

Health and Agriculture and Rural Development

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Food Safety: Integrated food safety planning and activities—October 2009, no. 11, p. 107 (repeated once since October 2006)**
We again recommend that the Departments of Health and Agriculture and Rural Development, in cooperation with Alberta Health Services and federal regulators, improve planning and coordination of food safety activities and initiatives. This includes:
- each provincial ministry defining its own food safety policies, objectives and measures (satisfactory progress)
- coordinating provincial food safety policies and planning so initiatives are integrated (satisfactory progress)
- ensuring provincial approaches align with initiatives being developed through federal/provincial/territorial committees (satisfactory progress)
- improving day-to-day coordination of provincial food safety activities
- encouraging the joint application of HACCP and HACCP related programs in Alberta, and (satisfactory progress)
- improving cooperation and working relationships among provincial and federal partners such as the First Nations and Inuit Health Branch and the Canadian Food Inspection Agency

3+ **Food safety: Accountability—October 2009, no. 13, p. 114 (repeated once since October 2006)**
We again recommend that the Departments of Health and Agriculture and Rural Development improve reporting on food safety in Alberta.

Health, Agriculture and Rural Development and Alberta Health Services

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

3+ **Food safety: Eliminating gaps in food safety inspection coverage—October 2009, no. 12, p. 111 (repeated once since October 2006)**
We again recommend that Alberta Health Services and the Departments of Health and Agriculture and Rural Development, working with federal regulators, eliminate the existing gaps in food safety coverage in Alberta. Gaps include:
- mobile butchers
- consistently administering the *Meat Facility Standard*
- coordinating inspections in the “non-federally registered” sector

Departments of Health and Alberta Health Services

The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Seniors care: Effectiveness of services in long-term care facilities—October 2005, no. 7, p. 59**
We recommend that the Department of Health and Alberta Health Services assess the effectiveness of services in long-term care facilities.

3+ **Implementing the Provincial Mental Health Plan: Implementation systems—April 2008, no. 3, p. 72**
We recommend that Alberta Health Services and the Department of Health, working with other mental health participants, strengthen implementation of the *Provincial Mental Health Plan* by improving:
- implementation planning
- the monitoring and reporting of implementation activities against implementation plans, and
- the system to adjust the *Plan* and implementation initiatives in response to changing circumstances

3+ **Mental health: Standards—October 2008, no. 16, p. 162**
We recommend that the Department of Health and Alberta Health Services create provincial standards for mental health services in Alberta.

Mental health: Funding, planning, and reporting—October 2008, p. 186
We recommend that the Department of Health and Alberta Health Services ensure the funding, planning, and reporting of mental health services supports the transformation outlined in the *Provincial Mental Health Plan* as well as system accountability.

Mental health: Aboriginal and suicide priorities—October 2008, p. 190
We recommend that the Department of Health and Alberta Health Services consider whether the implementation priority for aboriginal and suicide issues is appropriate for the next provincial strategic mental health plan.

Electronic health records: Oversight and accountability for electronic health records—October 2009, no. 6, p. 73
We recommend that the Department of Health and Alberta Health Services, working with the Electronic Health Records Governance Committee, improve the oversight of electronic health record systems by:
- maintaining an integrated delivery plan that aligns with the strategic plan
- improving systems to regularly report costs, timelines, progress and outcomes

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:
Food safety: Tools to promote and enforce food safety—October 2006, vol. 1, p. 83
We recommend that Alberta Health Services and the Department of Health consider a wider range of tools to promote and enforce food safety.

Alberta Health Services

The following recommendations are outstanding and not yet ready for follow-up audits:
Performance measures for surgical services—October 2001, p. 135
We recommend that Alberta Health Services establish a comprehensive set of outcome-based performance measures for surgical facility services and incorporate these standards of performance into ongoing monitoring of contracted facilities.

3+ **Seniors care: Compliance with Basic Service Standards—October 2005, no. 6, p. 58**
We recommend that the Department of Health and Alberta Health Services improve the systems for monitoring the compliance of long-term care facilities with the *Basic Service Standards*. (Outstanding with respect to Alberta Health Services only.)

Seniors care: Information to monitor compliance with legislation—October 2005, p. 61
We recommend that the Department of Health, working with Alberta Health Services, identify the information required from long-term care facilities to enable the Department and Alberta Health Services to monitor their compliance with legislation. (Outstanding with respect to Alberta Health Services only.)

3+ **Contracting practices: Internal controls—November 2006, no. 1, p. 14**
We recommend that Alberta Health Services management improve controls over contracting by:
- ensuring adequate segregation of duties exists over the contracting process
- monitoring and verifying contractors' compliance with contract terms and conditions

3+ **Contracting practices: Board governance—November 2006, no. 3, p. 17**
We recommend that the Board, at least annually, receive reports from management on the design and effectiveness of the Alberta Health Services internal controls.

3+ **Mental health: Housing and supportive living—October 2008, no. 17, p. 164**
We recommend that Alberta Health Services encourage mental health housing development and provide supportive living programs so mental health clients can recover in the community.

3+ **Mental health: Concurrent disorders—October 2008, no. 18, p. 168**
We recommend that Alberta Health Services strengthen integrated treatment for clients with severe concurrent disorders (mental health issues combined with addiction issues).

3+ **Mental health: Gaps in service—October 2008, no. 19, p. 171**
We recommend that Alberta Health Services reduce gaps in mental health delivery services by enhancing:
- mental health professionals at points of entry to the system
- coordinated intake
- specialized programs in medium-sized cities
- transition management between hospital and community care

Mental health: Provincial coordination—October 2008, p. 176
We recommend that Alberta Health Services coordinate mental health service delivery across the province better by:
- strengthening inter-regional coordination
- implementing standard information systems and data sets for mental health
- implementing common operating procedures
- collecting and analyzing data for evidence-based evaluation of mental health programs

Mental health: Community-based service delivery—October 2008, p. 181
We recommend that Alberta Health Services strengthen service delivery for mental health clients at regional clinics by improving:

- wait time management
- treatment plans, agreed with the client
- progress notes
- case conferencing
- file closure
- timely data capture on information systems
- client follow up and analysis of recovery

Contract documentation—October 2008, p. 312
We recommend that Alberta Health Services develop and implement a sole-sourcing policy for contracts and ensure that sole-sourcing is clearly documented and justified. We also recommend Alberta Health Services ensure contract amendments, including changes to deliverables, are documented and agreed to by both parties.

3+ **Food safety: Information systems—October 2009, no. 10, p. 99**
(repeated once since October 2006)
We again recommend that Alberta Health Services, supported by the Department of Health and Wellness, improve their automated food safety information systems. This includes:

- enhancing system management, security, and access control
- ensuring data consistency
- ensuring that service level agreements are in place
- developing reporting capacity for management and, accountability purposes

Information technology control policies and processes—October 2009, no. 29, p. 262
We recommend that Alberta Health Services:

- develop an information technology control framework, including appropriate risk management processes and controls, for the management of its information technology resources
- monitor compliance with security policies, implementing effective change management processes and improving passwords controls

Capital project monitoring systems—October 2009, no. 32, p. 271
We recommend that Alberta Health Services improve the efficiency and effectiveness of its financial capital project monitoring and reporting systems and processes by:

- implementing common systems, policies and procedures to track and monitor key financial information
- providing relevant, timely and accurate information to Executive Management and the Audit and Finance Committee

Expenditure policies and approvals—October 2009, p. 277
We recommend that Alberta Health Services improve the efficiency and effectiveness of its expense approval controls by:

- developing and implementing a clear and comprehensive expenditure approval policy
- automating the expenditure controls within the purchasing system

Approval of drug purchases—October 2009, p. 278
We recommend that Alberta Health Services improve controls for drug purchases by ensuring they are properly approved and duties are appropriately segregated.

Financial operations transition plan—October 2010, no. 19, p. 164
We recommend that Alberta Health Services prepare and implement a formal transition plan for the organization's finance operations. The plan should include and integrate the following:

- assessing the resources, timelines and critical path needed to consolidate the general ledger and sub-ledger systems
- ensuring rigorous change management controls are applied before implementing application system changes
- harmonizing financial reporting policies and processes across the organization
- determining the adequate amount of human resources and skill levels required to implement the plan and then keep the processes operational

Effectiveness of insurance reciprocal—October 2010, no. 21, p. 167
We recommend that Alberta Health Services assess the effectiveness of its arrangement with the *Liability and Property Insurance Plan* as a risk management tool, and assess the resulting accounting implications.

Accounting for restricted contributions—October 2010, no. 22, p. 168
We recommend that Alberta Health Services implement consistent and efficient accounting processes for externally restricted contributions to assure the Alberta Health Services Board that it is complying with the restrictions attached to those contributions.

Oversight at AHS waste generating sites—July 2012, no. 1, p. 15
We recommend that Alberta Health Services establish systems for overseeing the management of healthcare waste materials at all AHS sites that generate these materials.

Waste handling policies and procedures at AHS sites—July 2012, no. 2, p. 16
We recommend that Alberta Health Services improve the handling and disposal of healthcare waste materials at its sites by:
- standardizing healthcare waste materials handling policies and procedures across sites
- establishing processes to monitor and enforce facilities' compliance with healthcare waste materials handling policies and procedures
- ensuring chemical waste hazards are remediated promptly
- pursuing more opportunities to reduce, reuse and recycle materials that could enter the healthcare waste stream

Contract management for disposal of healthcare waste materials at AHS sites—July 2012, no. 3, p. 19
We recommend that Alberta Health Services take steps to improve its contract management processes for healthcare waste materials by:
- requiring sites to verify services have been performed before approving vendor invoices for payment
- developing risk-focused systems to monitor healthcare waste management for purposes of controlling volumes and costs

Healthcare waste materials at contracted health service providers—July 2012, no. 4, p. 41
We recommend that Alberta Health Services assess its risk related to healthcare waste materials produced by contracted health service providers and ensure contract provisions manage that risk.

AHS accountability for PCNs—July 2012, no. 6, p. 40
We recommend that Alberta Health Services within the context of its provincial primary healthcare responsibilities:
- define goals and service delivery expectations for its involvement in Primary Care Networks
- define performance measures and targets
- evaluate and report on its performance as a PCN joint venture participant

Data conversion testing—October 2012, no. 22, p. 119
We recommend that Alberta Health Services improve documentation of its conversions from legacy systems to new systems by requiring the project team clearly document how they ensured:
- converted data is complete and accurate
- the new system functions with the converted data as intended

Payroll—accuracy monitoring activities—October 2012, no. 23, p. 121
We recommend that Alberta Health Services improve its monitoring activities to ensure the accuracy of transactions in its payroll system.

Accounts payable system—goods received not invoiced listing—October 2012, no. 24, p. 122
We recommend that Alberta Health Services complete the review of old amounts on the Goods Received Not Invoiced report to validate amounts or resolve issues as they arise before year end.

Fees and charges—October 2012, no. 25, p. 123
We recommend that Alberta Health Services:
- reinforce its admissions policies to ensure consistent application
- review its controls over the processes that generates fees and charges revenue, to ensure they are appropriately designed, consistent across regions and aligned with current policies

Journal entry review process—October 2012, no. 26, p. 124
We recommend that Alberta Health Services implement a recurring process to ensure significant and/or unusual journal entries are reviewed and approved appropriately.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Mental health: Not-for-profit organizations—October 2008, p. 169
We recommend that Alberta Health Services improve relationships with not-for-profit organizations to provide better coordinated service delivery.

Expense claims and corporate credit cards controls—October 2008, p. 311
We recommend that Alberta Health Services strengthen and follow its policies and processes for employee expense claims and corporate credit cards. We also recommend that Alberta Health Services develop and implement policies and guidance on appropriate expenses for hosting and working sessions.

Food safety: Inspection programs—October 2009, no. 9, p. 93
(repeated once since October 2006)
3+ We again recommend that Alberta Health Services improve their food establishment inspection programs. Specifically, Alberta Health Services should:
- inspect food establishments following generally accepted inspection frequency standards
- ensure that inspections are consistently administered and documented
- follow up critical violations promptly to ensure that food establishments have corrected those violations
- use their enforcement powers to protect Albertans from the highest risk food establishments (satisfactory progress)

Capital project funding and approval—October 2009, no. 31, p. 269
We recommend that Alberta Health Services:
- obtain appropriate approval from the Minister of Health and Wellness and secure adequate capital funding before starting capital projects that are internally funded or debt financed
- ensure budgets include the estimated future operating costs associated with new capital

Physician recruitment incentives—October 2009, p. 279
We recommend that Alberta Health Services improve controls for physician recruitment incentives by developing and implementing a policy that identifies:
- criteria and approvals required for granting loans, income guarantees and relocation allowances
- monitoring and collection procedures for physician loans

Funding agreements for capital projects—October 2010, no. 20, p. 166
We recommend that Alberta Health Services ensure that funding agreements are signed prior to commencement of construction of capital projects, and are formally amended when there are significant changes in the scope of a capital project.

Human Services

Department

The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Child intervention services: Accreditation systems for service providers—October 2007, no. 7, vol. 1, p. 82**
We recommend that the Department of Human Services evaluate the cost-effectiveness of accreditation systems and the assurance they provide.

Child intervention services: Department compliance monitoring—October 2007, no. 8, vol. 1, p. 83
We recommend that the Department of Human Services improve compliance monitoring processes by:
3+
- incorporating risk-based testing in case-file reviews
- providing feedback to caseworkers on monitoring results of case-file reviews
- obtaining and analyzing information on Authorities' monitoring of service providers

3+ **Monitoring and enforcement of training providers—October 2008, no. 24, p. 245**
We recommend that the Department of Human Services improve its monitoring of tuition-based training providers by:
- assessing whether performance expectations are being met
- quantifying tuition refunds that may be owing to the Department
- implementing policies and procedures that outline steps and timelines for dealing with non-compliance problems

Occupational Health and Safety: Work Safe Alberta planning and reporting—April 2010, p. 43
We recommend that the Department of Human Services improve its planning and reporting systems for occupational health and safety by:
- obtaining data on chronic injuries and diseases to identify potential occupational health and safety risks
- completing the current update of the *Work Safe Alberta Strategic Plan*
- measuring and reporting performance of occupational health and safety programs and initiatives that support key themes of the *Plan*

Occupational Health and Safety: Certificate of Recognition—April 2010, p. 48
We recommend that the Department of Human Services improve its systems to issue Certificates of Recognition by:
- obtaining assurance on work done by Certificate of Recognition auditors
- consistently following-up on recommendations made to certifying partners

Daycare and day home regulatory compliance monitoring: Documentation and training—October 2010, p. 37
We recommend that the Department of Human Services, working with the Child and Family Services Authorities, review documentation and training requirements for monitoring licensed and approved programs to ensure requirements are being met.

Occupational Health and Safety: Promoting and enforcing compliance—July 2012, no. 12, p. 83 (repeated once since April 2010)
We again recommend that the Department of Human Services enforce compliance with the law by high-risk employers and workers.

Child and Family Services Authorities

The following recommendations are outstanding and not yet ready for follow-up audits:

Child intervention services: Authorities compliance monitoring processes—October 2007, vol. 1, p. 86
We recommend that the Child and Family Services Authorities improve compliance monitoring processes by providing caseworkers with:
- training on file preparation and maintenance
- feedback from the monitoring results of case-file reviews

Child intervention services: Authorities monitoring of service providers—October 2007, vol. 1, p. 88
We recommend that the Child and Family Services Authorities improve the evaluation of service providers by coordinating monitoring activities and sharing the results with the Department.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Daycare and day home regulatory compliance monitoring: Improve consistency of monitoring—October 2010, p. 38
We recommend that Child and Family Services Authorities improve systems to ensure their consistent compliance with monitoring and enforcement policies and processes.

Daycare and day home regulatory compliance monitoring: Improve follow-up processes—October 2010, no. 3, p. 39
We recommend that Child and Family Services Authorities improve systems for monitoring and enforcing child care program compliance with statutory requirements and standards by ensuring that all verbal warnings are adequately documented and resolved.

Office of the Public Trustee

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

New vendor set-up—October 2010, no. 24, p. 180
We recommend that the Office of the Public Trustee improve controls for inputting new vendors in its Public Trustee Information System.

Recurring payments—October 2010, p. 180
We recommend that the Office of the Public Trustee improve its controls for issuing and stopping recurring payments.

Persons with Developmental Disabilities Boards

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Contract monitoring and evaluation—October 2004, no. 9, p. 111
3+ We recommend that the Persons with Developmental Disabilities Provincial Board work with the six Community Boards to strengthen the monitoring and evaluation of the performance of service providers by:
- requiring individual funding service providers to provide adequate financial reporting
- obtaining annual financial statements to evaluate the financial sustainability of critical service providers
- implementing a sustainable, risk-based internal audit plan
- developing and implementing standard procedures to be followed when Community Board staff are in contact with service providers; and
- implementing a method to evaluate service provider performance

Workers' Compensation Board
There are no outstanding recommendations for this entity.

Infrastructure

Ministry
Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Information technology risk—October 2009, p. 287
We recommend that the Ministry of Infrastructure develop and implement an information technology risk management framework.

Departments of Infrastructure and Treasury Board and Finance
Management has identified these recommendations as implemented—to be confirmed with a follow-up audits:

Alberta schools alternative procurement: Challenging and supporting assumptions—April 2010, no. 1, p. 22
We recommend that the Departments of Treasury Board and Finance and Infrastructure improve processes, including sensitivity analysis, to challenge and support maintenance costs and risk valuations.

Alberta schools alternative procurement: Transparency—April 2010, no. 2, p. 24
We recommend that the Departments of Treasury Board and Finance and Infrastructure follow their own guidance to publish a value for money report upon entering into a public private partnership agreement.

International and Intergovernmental Relations

Ministry
The following recommendation is outstanding and not yet ready for a follow-up audit:

Evaluating international offices' performance—October 2008, p. 324
We recommend that the Ministry of International and Intergovernmental Relations improve the processes management uses to evaluate the performance of each international office.

Justice and Solicitor General

Department
The following recommendations are outstanding and not yet ready for follow-up audits:

Commercial vehicle safety: Inspection tools and vehicle selection—October 2009, p. 124
We originally recommended that the Department of Transportation improve its inspection capability by incorporating risk analysis into the selection of vehicles for roadside inspection and increasing the amount of information available at roadside.

Commercial vehicle safety: Analysis and measurement—October 2009, no. 15, p. 129
We originally recommended that the Department of Transportation further develop and improve its data analysis practices for use in program delivery and performance measure reporting.

Municipal Affairs

Department
The following recommendation is outstanding and not yet ready for a follow-up audit:

Disaster recovery program—October 2009, no. 34, p. 301
We recommend that the Department of Municipal Affairs improve its management of the disaster recovery program by:
- setting timelines for key steps that must be performed before federal government funding can be received
- periodically assessing and adjusting costs and recovery estimates based on current information

Alberta Social Housing Corporation
The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Seniors care: Effectiveness of Seniors Lodge Program—October 2005, no. 12, p. 66**
We originally recommended that the Department of Health:
1. improve the measures it uses to assess the effectiveness of the Seniors Lodge Program
2. obtain sufficient information periodically to set the minimum disposable income of seniors used as a basis for seniors lodge rent charges

Seniors care: Determining future needs for Alberta Seniors Lodge Program—October 2005, p. 67
We originally recommended that the Department of Health improve its processes for identifying the increasing care needs of lodge residents and consider this information in its plans for the Seniors Lodge Program.

Social housing contracting policy—November 2011, no. 17, p. 120
We recommend that the Alberta Social Housing Corporation develop a contracting policy for capital additions to its social housing portfolio and strengthen related contract management processes.

Service Alberta

Ministry and Department

The following recommendations are outstanding and not yet ready for follow-up audits:

3+

Guidance to implement information technology control frameworks—April 2008, no. 7, p. 170
We recommend that the Ministry of Service Alberta, in conjunction with all ministries and through the Chief Information Officer Council, develop and promote:

- a comprehensive information technology control framework, and accompanying implementation guidance, and
- well-designed and cost-effective information technology control processes and activities.

Access- and security-monitoring of the revenue application systems—October 2008, p. 346
We recommend that the Ministry of Service Alberta ensure adequate logging and monitoring processes are in place in all application systems that host or support financial information and Albertans' personal information.

System-conversion process—October 2008, p. 349
We recommend that the Ministry of Service Alberta document its review of actual system-conversion activities to ensure that they comply with the approved test plan for system conversion and data migration.

Information technology resumption plan—October 2009, no. 35, p. 311
We recommend that the Ministry of Service Alberta complete and test an information technology resumption plan.

Payroll review processes—October 2009, p. 312
We recommend that the Ministry of Service Alberta improve its process to provide timely supporting documentation on payroll information that it maintains for itself and its client ministries.

Ranking of non-compliance at registry agencies—October 2012, no. 27, p. 133
We recommend that Service Alberta rank the significance of findings it identifies at registry agencies and document its follow-up processes.

Tourism, Parks and Recreation

Ministry

There are no outstanding recommendations for this entity.

Transportation

Ministry and Department

The following recommendations are outstanding and not yet ready for follow-up audits:

Commercial vehicle safety: Progressive sanctions—October 2009, no. 14, p. 127
We recommend that the Department of Transportation strengthen enforcement processes relating to, or arising from, roadside inspections.

Improve processes to value donated assets in the Department financial statements—October 2010, p. 197
We recommend that the Department of Transportation:

- enter into agreements with donors that:
  - provide the Department of Transportation with assurance on the fair value of the donated assets
  - specify whether donation receipts will be issued
- document its support for the valuation reported in its financial statements, including the procedures performed, assumptions made and source documents reviewed

Managing Structural Safety of Bridges: Design of level 1 visual inspections—October 2012, no. 1, p. 21
We recommend that the Department of Transportation improve its inspection processes by ensuring that it collects all the information it needs to assess the quality of inspections.

Managing Structural Safety of Bridges: Quality of inspections—October 2012, no. 2, p. 23
We recommend that the Department of Transportation regularly assess whether contractors perform inspections following its standards and take corrective action if they do not.

Managing Structural Safety of Bridges: Inspector certification—October 2012, no. 3, p. 24
We recommend that the Department of Transportation ensure that contractors who perform inspections are properly certified.

Managing Structural Safety of Bridges: Timeliness and completeness of inspections—October 2012, no. 4, p. 25
We recommend that the Department of Transportation ensure that bridges are inspected as frequently as its standards require.

Managing Structural Safety of Bridges: Assessing whether to contract out program delivery—October 2012, no. 5, p. 26
We recommend that the Department of Transportation regularly assess whether it should contract out inspections or do them itself.

Managing Structural Safety of Bridges: Contracting level 1 bridge inspections—October 2012, no. 6, p. 27
We recommend that the Department of Transportation improve its process to contract its level 1 inspections by:
- documenting how it establishes criteria for assessing candidates and awards points for each criterion.
- ensuring proposal requirements do not limit qualified candidates.

Managing Structural Safety of Bridges: Controls over access to the bridge information system—October 2012, no. 7, p. 28
We recommend that the Department of Transportation improve its processes to monitor access to the computer system that manages bridge inventory and inspections.

Managing Structural Safety of Bridges: Maintenance activities—October 2012, no. 8, p. 29
We recommend that the Department of Transportation improve the information that senior management receives on inspector activities, results, maintenance, and other actions.

Managing Structural Safety of Bridges: Capital planning—October 2012, no. 9, p. 31
We recommend that the Department of Transportation ensure that it gives decision makers the information they need to assess the impact of funding alternatives on bridge safety and protection of the province's investment.

Monitoring access and data entry to the Program Management Application— October 2012, no. 28, p. 141
We recommend that the Department of Transportation improve its processes to monitor access and data entry to the computer application it uses to manage contracted work for maintenance of provincial highways.

Vehicle use—October 2012, no. 29, p. 142
We recommend that the Department implement a policy about vehicle use, with due regard for economy

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Information technology risk assessment—October 2009, p. 329
We recommend that the Department of Transportation develop and implement an information technology risk assessment framework.

Treasury Board and Finance

Ministry and Department

The following recommendations are outstanding and not yet ready for follow-up audits:

3+ **Infrastructure needs: Improving current information—October 2007, no. 5, vol. 1, p. 59**
We recommend that the Department of Treasury Board and Finance, working with the Treasury Capital Planning Committee, examine how the current information provided to Treasury Board and Finance can be improved.

Inconsistent budgeting and accounting for grants—October 2007, vol. 2, p. 178
We recommend that the Ministry of Treasury Board and Finance, working with other departments, provide guidance to ensure consistent accounting treatment of grants throughout government.

3+ **Chief executive officer: Guidance—October 2008, no. 1, p. 27**
We recommend that the Deputy Minister of Treasury Board and Finance through the Agency Governance Secretariat assist agencies and departments by providing guidance in the areas of chief executive officer selection, evaluation and compensation.

3+ **Chief executive officer: Accountability—October 2008, no. 2, p. 29**
We recommend the Agency Governance Secretariat, on behalf of ministers, annually obtain information from agencies on chief executive officer evaluation and compensation processes to assess if good practices are being consistently followed. The results of these systems assessments should be reported to ministers who should then hold boards of directors accountable for their decisions.

3+ **Chief executive officer compensation disclosure—October 2008, no. 3, p. 32**
We recommend that the Treasury Board and Finance consider applying the new private-sector compensation-disclosure requirement to the Alberta public sector.

Salary and benefits disclosure—October 2008, p. 371
We recommend that the Ministry of Treasury Board and Finance, through the *Salaries and Benefits Disclosure Directive*, clarify what form of disclosure, under what circumstances, is required of the salary and benefits of an individual in an organization's senior decision making/management group who is compensated directly by a third party.

Public agencies: Executive compensation practices—October 2009, no. 1, p. 23
We recommend that the Deputy Minister of Treasury Board and Finance, through the Agency Governance Secretariat, assist public agencies and departments by providing guidance on executive compensation practices for all public agency senior executives.

Public agencies: Disclosure of termination benefits paid—October 2009, no. 2, p. 29
We recommend that the Ministry of Treasury Board and Finance increase transparency of termination benefits by adopting disclosure practices for Alberta public agencies that disclose termination benefits paid.

3+ **Infrastructure needs: Deferred maintenance—October 2010, no. 8, p. 89**
(repeated once since October 2007)
We again recommend that the Department of Treasury Board and Finance, in consultation with departments, develop objectives, timelines and targets for reducing deferred maintenance, and include information on deferred maintenance in the province's *Capital Plan*.

3+ **Infrastructure needs: Maintaining assets over their life—October 2010, no. 9, p. 92**
(repeated once since October 2007)
We again recommend that the Department of Treasury Board and Finance establish a process that enables public infrastructure assets to be properly maintained over their life.

Improving processes to select performance measures—November 2011, no. 3, p. 57
We recommend the Department of Treasury Board and Finance work with other ministries to improve processes for selecting measures for public reporting, including the sample to be reviewed by the Auditor General.

Improve ministry annual report processes—July 2012, no. 10, p. 65
We recommend that the Department of Treasury Board and Finance work with ministries to improve annual report:
- preparation processes for identifying significant performance measure variances and developing explanations for these variances for reporting
- approval processes, including senior management sign-off of a summary of the year's performance measure variances and significant variance assessments

Improve performance measure reporting guidance and standards—July 2012, no. 11, p. 67
We recommend that the Department of Treasury Board and Finance improve its guidance for:
- performance measure target setting
- variance identification
- significant performance measure variance assessments and annual report explanation development
- preparing the results analysis

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Government credit cards—October 2007, no. 17, vol. 1, p. 174
We recommend that the Department of Treasury Board and Finance, working with all other departments, further
3+ improve controls for the use of government credit cards by:
1. communicating responsibilities to all cardholders
2. clarifying the support required to confirm both the nature and purpose of transactions
3. providing guidance to senior financial officers and accounting staff on dealing with significant non-compliance

3+ **Infrastructure needs: Process to prioritize projects—October 2007, no. 4, vol. 1, p. 57**
We recommend that the Department of Treasury Board and Finance improve the process to evaluate proposed infrastructure projects that ministries submit.

Report on selected payments to Members of the Legislative Assembly—Efficiency—October 2008, p. 376
We recommend that the Department of Treasury Board and Finance use current technology to regularly and efficiently compile the material for public reporting.

Report on selected payments to Members of the Legislative Assembly: Timely—October 2008, p. 377
We recommend that the President of Treasury Board and Finance arrange for all final reviews of the *Report of Selected Payments to Members and Former Members of the Legislative Assembly and Persons Directly Associated with Members of the Legislative Assembly* to take place within six months of the year end so that the *Report* can be ready for tabling in the Legislative Assembly.

Oversight of financial institutions: Improve accountability—April 2010, no. 12, p. 96
We recommend that the Department of Treasury Board and Finance clarify its business objectives for Alberta Treasury Branches, within their Memorandum of Understanding, in relation to the level of risk the Department expects Alberta Treasury Branches to take.

Oversight of financial institutions: Completion of risk assessments—April 2010, p. 100
We recommend that the Department of Treasury Board and Finance complete risk assessments and evaluate the quality of the regulated entities' risk management practices.

Oversight of financial institutions: Implementation plan for regulatory and supervisory frameworks—April 2010, no. 13, p. 97
We recommend that the Department of Treasury Board and Finance develop an implementation plan for its approach to regulating and supervising regulated financial institutions.

Oversight of financial institutions: Monitoring legislative compliance—April 2010, no. 14, p. 101
We recommend that the Department of Treasury Board and Finance strengthen its processes to ensure identified legislative non-compliance matters are remediated.

Oversight of financial institutions: Improve transparency—April 2010, p. 102
We recommend that the Department of Treasury Board and Finance:
- clearly identify which guidelines and supervisory rules are applicable for the regulated entities
- develop processes to monitor compliance with the guidelines
- assess how risks are mitigated for those guidelines and supervisory rules that are not applicable

Departments of Treasury Board and Finance and Infrastructure
Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Alberta schools alternative procurement: Challenging and supporting assumptions—April 2010, no. 1, p. 22
We recommend that the Departments of Treasury Board and Finance and Infrastructure improve processes, including sensitivity analysis, to challenge and support maintenance costs and risk valuations.

Alberta schools alternative procurement: Transparency—April 2010, no. 2, p. 24
We recommend that the Departments of Treasury Board and Finance and Infrastructure follow their own guidance to publish a value for money report upon entering into a public private partnership agreement.

Alberta Capital Finance Authority
There are no outstanding recommendations for this entity.

Alberta Investment Management Corporation
The following recommendations are outstanding and are not yet ready for follow-up audits:

Help clients meet financial reporting requirements—October 2010, no. 17, p. 156
We recommend that Alberta Investment Management Corporation identify financial reporting requirements in its investment management agreements with clients. The Alberta Investment Management Corporation should meet with the clients to understand their financial reporting frameworks, their financial accounting requirements and the investment-related information they need to prepare financial statements.

Investment risk IT system—November 2011, no. 14, p. 97
We recommend that Alberta Investment Management Corporation improve its controls over the investment risk IT system.

AIMCo's revenue from cost recoveries—November 2011, no. 15, p. 99
We recommend that Alberta Investment Management Corporation reconcile its revenue from cost recoveries reported in its financial statements to the total fees it recovers from its clients and investment pools.

Securities reconciliation—October 2012, no. 32, p. 151
We recommend that Alberta Investment Management Corporation obtain third party statements for all investments not held by external custodians and reconcile its records to those statements.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve controls over investment general ledger—October 2010, no. 18, p. 157
We recommend that Alberta Investment Management Corporation implement additional control procedures so that the Corporation itself can ensure the completeness and accuracy of its Genvest investment general ledger.

Alberta Gaming and Liquor Commission

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve quality of employee benefits note disclosure in the financial statements—October 2012, no. 33, p. 154
We recommend that management of the Alberta Gaming and Liquor Commission obtain sufficient information to ensure compliance with International Financial Reporting Standards for disclosures in the employee benefit plans note in its annual financial statements.

ATB Financial

The following recommendations are outstanding and not yet ready for follow-up audits:

Treasury management: Liquidity simulations—October 2008, p. 128
We recommend that Alberta Treasury Branches further expand its use of liquidity simulations as a forward looking liquidity risk measurement tool. We also recommend that the Asset Liability Committee and the Board Oversight Committee consider whether the results of liquidity simulations indicate a need to modify its business plan.

Treasury management: Interest rate risk modeling and stress testing—October 2008, p. 134
We recommend that Alberta Treasury Branches define its significant interest rate risk exposures and model those significant exposures to assess the effects on future financial results.

3+ **Internal control weaknesses—October 2008, no. 29, p. 278**
We recommend that Alberta Treasury Branches validate and approve business processes and internal control documentation developed by its internal control group and implement plans to resolve identified internal control weaknesses.

3+ **Treasury management: Interest rate risk model assumptions—April 2011, no. 1, p. 48 (repeated once since October 2008)**
We again recommend that Alberta Treasury Branches improve processes for creating, applying and validating assumptions used in its interest rate risk models.

New banking system internal controls—October 2012, no. 30, p. 148 (repeated once since November 2011)
We again recommend that ATB Financial confirm that the key controls in the new banking system, as identified in its risk and control matrices, are implemented and operate effectively.

Payment card industry—October 2012, no. 31, p. 149
We recommend that ATB Financial put in place processes to monitor its compliance with the Payment Card Industry's requirements.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

3+ **Securitization policy and business rules—October 2008, no. 31, p. 280**
We recommend that Alberta Treasury Branches develop and implement a securitization policy and securitization business rules.

Service auditor reports: User control considerations—October 2009, p. 227
We recommend that Alberta Treasury Branches improve its processes related to service providers by ensuring its business areas:

- receive service provider audit reports
- review service provider audit reports and assess the impact of identified internal control weaknesses
- put end-user controls in place to complement service provider controls

AUDITOR GENERAL
Alberta

Auditor General of Alberta

Results Analysis, Financial Statements, and Other Performance Information for the Year Ended March 31, 2012

Mr. David Xiao, MLA
Chair
Standing Committee on Legislative Offices

Office of the Auditor General of Alberta—Results Analysis, Financial Statements and Other Performance Information for the Year Ended March 31, 2012

I am honoured to send the above report to the members of the Legislative Assembly. This document has an analysis of Office operations and our audited financial statements for the fiscal period April 1, 2011 to March 31, 2012.

[Original signed by Merwan N. Saher, FCA]
Auditor General

Edmonton, Alberta
June 28, 2012

Our Purpose

The Office

The Office of the Auditor General serves the Legislative Assembly and the people of Alberta. Our mandate is to examine and report publicly on government's management of, and accountability practices for, the public resources entrusted to it. Under the *Auditor General Act*, the Auditor General is the auditor of all government ministries, departments, funds and provincial agencies.

We focus our priorities and resources in areas that will result in improved:

- governance and ethical behaviour—these underpin the success of any organization
- safety and welfare of all Albertans—especially the most vulnerable in our society
- security and use of the province's resources—which belong to all Albertans and must be protected for future generations

To be successful, we must both be, and be seen to be, independent and accountable.

INDEPENDENCE

Our independence from those that we audit is required to ensure that our work is objective—based on facts and executed without preconceived opinion. The independence requirement is symbolized through the appointment of the Auditor General by the Legislative Assembly and our liaison with the Assembly through the Standing Committee on Legislative Offices. A primary element of the relationship is the Assembly's prerogative to authorize financing of the Office's operations.

Our business practices are designed to ensure that our staff remain free of any association that could potentially impair their objectivity.

ACCOUNTABILITY

We are answerable for our responsibilities under the *Auditor General Act* through our public reports, which are the tangible expressions of the work of the Office. Those who use public resources, as we do, should also demonstrate their accountability through clear and concise plans and reports on results.

The first part of accountability is to prepare and then act on a plan.[1] The second part is to report on results achieved and costs in relation to the plan and on how performance might be improved; hence this performance report.

We carry out our work using our vision, mission and values.

Vision

Adding value through expert auditing.

[1] The Standing Committee on Legislative Offices reviewed our business plan for 2012 (Business Plan 2011–2014) and approved our budget for 2012 (Budget 2011–2012) in November 2010 and the related Supplementary Supply in October 2011.

Mission

To serve Albertans by conducting comprehensive risk-based audits that provide independent assessments to help the Legislative Assembly hold government accountable.

Values

Respect—Every individual has the right to be heard and deserves to be treated with dignity and courtesy.

Trust—We earn it with everything that we say and do. We are accountable for our actions.

Teamwork—With integrity, we work together to generate better solutions.

Growth—We view individual success as professional growth together with a fulfilling personal life. We value both.

Core Business

Our core business is legislative auditing. We have six types of interrelated but separately distinguishable types of audit work so we can allocate resources and assess our performance. We are the auditor of every ministry, department, regulated fund and provincial agency. This responsibility includes universities, colleges and Alberta Health Services. In all, we are the auditor of approximately 175 entities.

The six types of auditing are:

1. **Financial statements**

   Every year we audit the financial statements of those entities for which we have been appointed auditor, including the consolidated financial statements of the Government of Alberta. Our auditor's report on each of these entities provides our opinion on whether the financial statements are presented fairly in accordance with appropriate standards. These recurring annual audits provide assurance on the quality of the financial reporting provided to the Legislative Assembly of Alberta.

2. **Compliance with authorities**

   A variety of rules, in statutes, regulations, central agency directives and policies, and departmental procedures, governs the proper conduct of government business. In all of our audits, we test transactions and activities to identify and report publicly if there has been non-compliance with the law. Adherence to laws, regulations and other rules is an important part of assessing accountability.

3. **Performance measures**

   For departments and some agencies, we review selected non-financial measures of performance in the entity's annual report. And, we audit selected measures in the annual progress report on the government's business plan, titled *Measuring Up*. We report on the reliability, understandability, comparability and completeness of the selected measures of performance. Our work is not designed to provide assurance on the relevance of the measures to users.

4. **Results analysis**
   Each ministry annual report contains results analysis. Essentially, management's purpose is to integrate the financial and non-financial performance information into a clear and concise interpretation of actual performance in relation to plans. We intend to develop a methodology that will allow us to provide observations, and perhaps assurance in relation to appropriate criteria, on management's analysis of performance.

5. **Systems**
   Sections 19(2)(d) and (e) of the *Auditor General Act* require us to report when "accounting systems and management control systems, including those systems designed to ensure economy and efficiency, …were not in existence, were inadequate or had not been complied with" or "when appropriate and reasonable procedures could have been used to measure and report on the effectiveness of programs, those procedures were either not established or not being complied with".
   We meet this expectation in two ways:
   - **Stand-alone audits**—We audit major programs or initiatives that an organization undertakes to achieve its goals. In a stand-alone systems audit, we answer the question, "Does the organization have the policies, processes, and controls to accomplish its goals and mitigate its risks economically and efficiently?" Such systems include procedures to measure and report on the effectiveness of programs.
   - **By-products of other audits**—If we find that an organization could improve its systems in areas such as governance and accountability, internal control over financial management, information technology or performance reporting, we make recommendations to management.

6. **Research and advice**
   Our decision on what work to undertake includes input from Members of the Legislative Assembly, members of the public who contact us, management and our staff. Often this input requires research to understand the issue or to identify best practices. Alternatively, at the request of an organization of which we are the auditor, or a Committee of the Assembly, we may provide advice on a proposed course of action or a matter being studied.

Analysis of Our Results

1. Fiscal year 2012 financial results compared to budget/actual

- The Legislative Assembly funds our operations. For 2011–2012, it provided $23.7 million for expenses (including $975,000 supplementary supply) and $155,000 for capital investment, the total being $23.8 million.

  Our actual overall spending was $94,000 (0.4 of one per cent) above budget. Including this overage, in the last 5 years, the Office has returned over $1.7 million to the legislature. The small overage can be linked directly to a $400,000 increase in temporary staff services.

  The reason for the increase was twofold. Firstly, the operational consequence of increased peak season resource demand from the performance measures work to meet the government's June 30th deadline for ministry annual reports. Secondly, there was an increase in our staff turnover rate, particularly at the senior levels. In both cases, our requirement for high cost temporary resource services increased.

- Figure 1 illustrates the major patterns of our spending and the reality that as a professional auditing office, salary and benefits, plus professional service contracts for agents and temporary services represents over 90 per cent of our total operating expenses.

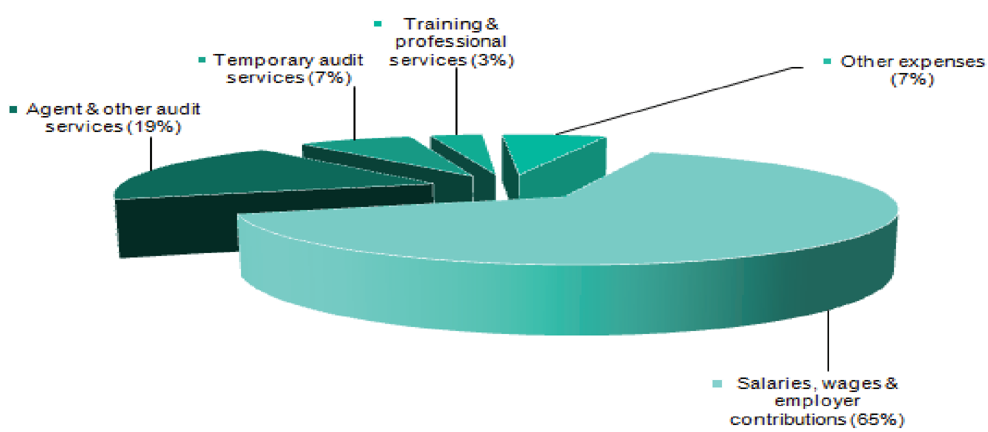


Figure 1: Spending by major expenditure category

- Our initial budget was established in November 2010 and had been held flat for three years.

  During 2011–2012, the Office faced many cost pressures, including the unbudgeted discontinuation of the public service salary freeze, issuance of one-time employee lump sum payments, and increased pension contributions. Additional resource requirements to meet new auditing and accounting standards, high staff turnover and the shift of performance measures audit work from summer to spring also caused cost increase.

In fact, total unbudgeted structural and one-time cost increases amounted to over $2.4 million; however, the Office requested only $975,000 in supplementary funding. When the Office made its presentation to the Standing Committee on Legislative Offices for supplementary funding in October 2011, we indicated that at the end of the year we might find ourselves having to carry forward a deficit into the next year. But we believed an aggressive course of action of not asking for the total unbudgeted shortfall was in keeping with the Office being responsive to taxpayers of Alberta by challenging ourselves to find cost savings.

- By reprioritizing initiatives and controlling costs, our 2011–2012 actual spending was close to the authorized budget but $1.7 million (or 7.6 per cent) higher than prior-year actual for the increased cost reasons explained above.

2. Fiscal year 2012 non-financial results

- In our *April 2011 Report*, we emphasized the Office's commitment to following up on the government's implementation of prior recommendations. Working within our budget and ensuring we meet our statutory obligation to perform all of the financial audits, meant there were no new major systems audits in fiscal 2012. There were, however, new recommendations that are a value added by-product of our financial statement auditing.

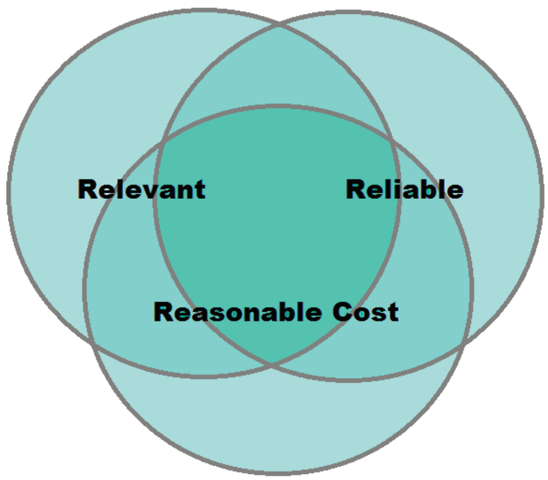
- Our goal over the next two years is to decrease the number of outstanding recommendations to a more manageable number (approximately 150), and then return to a better balance of both new and follow-up audits.

- Our *November 2011 Report* included six follow-up audits:

Project	Ministry
Climate Change and Emissions Management Fund—Use of Offsets	Environment
Revenue Forecasting Systems	Finance and Enterprise
Alberta's Mental Health Delivery Systems—Progress Report	Health and Wellness
Seniors Care in Long-Term Care Facilities	Health and Wellness/Seniors and Community Supports
Public Security Peace Officer Program	Solicitor General and Public Security
Elinor Lake	Sustainable Resource Development

- The *March 2012 Report* with its focus on post-secondary institutions was based on the findings from recent financial statement audits of Grant MacEwan University, Mount Royal University, Northern Alberta Institute of Technology, Southern Alberta Institute of Technology and all public colleges. Our *November 2011 Report* (page 63) had included the results from our audits of Athabasca University, University of Alberta, University of Calgary and University of Lethbridge. All 21 public post-secondary institutions spend $4.5 billion annually to educate Albertans and help build a knowledge-based economy. When institutions lack proper financial controls, they may not achieve their goals cost-effectively, in which case Albertans would not be getting proper value for their money. Our *March 2012 Report* summarized the lack of financial controls in certain post-secondary institutions.

- Our non-financial performance information is included in Schedule 2 in our financial statements. The performance results are audited in conjunction with the audit of the financial statements by our external auditor. The results in Schedule 2 are designed to demonstrate our accountability by showing our audit work to be relevant, reliable and done at a reasonable cost. Our goal is to maximize the congruity of the three Rs, as illustrated below:



- We continue to work on identifying better performance measures for the 2013–2014 Business Plan. In some cases we will reconfirm the key measures that follow and in other cases introduce some new measures. The discussion that follows focuses on what we believe are the key measures in schedule 2 of the financial statements:

Relevance

- **Measure 1.a**—Some Albertans and MLAs consider the most relevant measure of our performance to be the percentage of the Auditor General's primary recommendations accepted by government. In our March 2012 and November 2011 reports we had 32 new recommendations. One hundred per cent of them were accepted by government, a five percentage point increase over our target. And the second consecutive year of 100 per cent performance.
- **Measure 1.b**—As important as acceptance of a recommendation is, implementation of the recommendation is what matters. The Office views a low number of outstanding primary recommendations as a sign of good accountability. In fact, to demonstrate and reinforce this view, we have set the target for number of primary recommendations not implemented within three years of acceptance at "none". This year, the number of primary recommendations not implemented within three years of 42 has dropped by only one but reverses the previous increase in these recommendations from 27 to 43. We believe our focused effort, working with government, to reduce the number of outstanding recommendations discussed earlier in this report will result in the 42 more than three-year old recommendations dropping considerably in 2012–2013.

- **Measure 1.d**—(*the percentage of costs dedicated to stand-alone systems auditing/other auditing)*—The result was 21/79 per cent exceeding our target of 20/80 per cent and prior year actual of 18/82 per cent. This result indicates that we have managed to obtain and direct resources to doing the discretionary part of our mandate—stand-alone systems audits—at the planned level.

Reliability

Currently we have only one performance measure under Reliability. It is noted as not applicable because the outside review of our audit practice meeting audit standards will next be done in fiscal 2012–2013.

Reasonable cost

- **Measure 3.a**—*(staff turnover rate)*—Our result was 22 per cent in this fiscal year which is a 20 per cent increase over the previous year of 18 per cent. Turnover occurred most frequently at the level of newly designated staff auditors due to the opening up of the job market in conjunction with improved economic conditions. The lower the turnover rate of staff, the less costly is our operation, as supervision and training costs increase with turnover. We recognize the importance of staff retention and will continue to improve the overall working environment of the Office.

What We Have Learned

It is imperative that we use what we learn from analyzing our results to improve the value we add.

Optimal staff mix and external resource relationships

Currently we are reassessing the optimal staff mix for the Office. This will help us focus on number and levels of internal staff, and the appropriate balance between internal, temporary audit staff and agent firms. We are also reassessing whether we are using our agents optimally for us to do relevant, reliable work at a reasonable cost. This is necessary as higher cost external resources account for about $6.1 million, or 28 per cent of our expenses.

People development and performance management system

We understand the importance of retaining the staff whose training we have invested heavily in. By giving our staff increased responsibility and challenging them with higher level work, we believe we can reduce our high staff turnover level. In addition, we are currently upgrading our existing performance management system in order to better track growth and help our staff progress.

Risk management

During this last fiscal year, we involved all levels of staff to improve our risk management process. This involved identifying external and internal risks, ranking their criticality, identifying risk owners and risk mitigation approaches. We are continuing to monitor these risks and develop measures that will inform us and our stakeholders about how well are managing our risks. We expect to introduce new measures in the 2013–2014 Business Plan.

Independent peer review

We are continuing a comprehensive review of our key processes, policies and procedures to ensure that they meet their intended objectives and whether they are being complied with efficiently and effectively. We will then have a third party examine whether our key processes, policies and procedures enable us to provide added value through expert auditing meeting the tests of relevance, reliability and reasonable cost.

Alberta Legislature
Office of the Auditor General
Management's Responsibility for Financial Reporting

The accompanying financial statements of the Office of the Auditor General, including the performance measures, are the responsibility of Office management.

The financial statements have been prepared by management in accordance with Canadian public sector accounting standards. Financial statements are not precise, since they include certain amounts based on estimates and judgements. When alternative accounting methods exist, management has chosen those it considers most appropriate in the circumstances to ensure that the financial statements are presented fairly in all material respects.

The Office of the Auditor General maintains control systems designed to provide reasonable assurance as to the effectiveness and efficiency of operations, the relevance and reliability of internal and external reporting, and compliance with authorities. The costs of control are balanced against the benefits, including the risks that the control is designed to manage.

The financial statements, including performance measure results, have been audited by St. Arnaud Pinsent Steman, Chartered Accountants, on behalf of the members of the Legislative Assembly.

[Original signed by Merwan N. Saher, FCA]
Auditor General
June 22, 2012

Audited Financial Statements—March 31, 2012

Alberta Legislature
Office of the Auditor General
Audited Financial Statements
March 31, 2012

ST. ARNAUD PINSENT STEMAN
CHARTERED ACCOUNTANTS

Daniel J. St. Arnaud, CA**
John H. C. Pinsent, CA**
Benardus C. Steman, CA, CFA**

INDEPENDENT AUDITORS' REPORT

To the Members of the Legislative Assembly

Report on the Financial Statements

We have audited the accompanying financial statements of the Office of the Auditor General, which comprise the statement of financial position as at March 31, 2012, and the statement of operations and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting principles, and for such internal controls as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian public sector auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Unqualified Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Office of the Auditor General as at March 31, 2012, and its financial performance and its cash flows for the year then ended in accordance with Canadian public sector accounting principles.

[Original signed by John H.C. Pinsent Professional Corporation]

June 22, 2012

John H. C. Pinsent Professional Corporation
Chartered Accountant

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* An Association to Practise Chartered Accountancy ** Operates as a Professional Corporation

Alberta Legislature
Office of the Auditor General
Statement of Operations
Year ended March 31, 2012

	2012				2011
	Budget	**Authorized Supplementary**	**Authorized Budget**	**Actual**	**Actual**
Expenses:					
Personnel					
Salaries and wages (Note 7)	$12,080,000	$825,000	$ 12,905,000	$ 12,840,741	$11,375,481
Agent and other audit services fees	4,575,000	-	4,575,000	4,417,341	4,286,566
Employer contributions	2,385,000	150,000	2,535,000	2,648,872	2,281,378
Temporary staff services	1,300,000	-	1,300,000	1,699,621	1,591,287
Advisory services	220,000	-	220,000	257,007	169,682
Miscellaneous	10,000	-	10,000	77	470
	20,570,000	975,000	21,545,000	21,863,659	19,704,864
Supplies and services:					
Training and professional fees	850,000	-	850,000	777,532	837,304
Travel	580,000	-	580,000	604,991	559,160
Technology services	335,000	-	335,000	321,753	457,368
Materials and supplies	190,000	-	180,000	175,668	223,736
Telephone and communications	80,000	-	80,000	83,309	80,039
Rental of office equipment	70,000	-	70,000	66,019	78,844
Repairs and maintenance	20,000	-	20,000	22,238	22,333
Miscellaneous	20,000	-	30,000	18,466	16,679
	2,145,000	-	2,145,000	2,069,976	2,275,463
Total office professional services	22,715,000	975,000	23,690,000	23,933,635	21,980,327
Add: Amortization of capital assets	295,000	-	295,000	275,380	335,969
Total operating expenses	23,010,000	975,000	23,985,000	24,209,015	22,316,296
Less: Audit fee revenue	(2,300,000)	-	(2,300,000)	(2,923,648)	(2,639,836)
Cost of operations for the year (Note 6)	$20,710,000	$975,000	$ 21,685,000	$21,285,367	$19,676,460

The accompanying notes and schedules are an integral part of these financial statements.

Alberta Legislature
Office of the Auditor General
Statement of Financial Position
As at March 31, 2012

	2012	2011
Assets		
Audit fees receivable	$ 2,145,127	$ 1,978,109
Other receivables and prepaids	197,696	230,970
Capital assets (Note 3)	305,469	575,498
	$ 2,648,292	$ 2,784,577
Liabilities		
Accounts payable and accrued liabilities	$ 999,008	$ 2,732,593
Accrued vacation pay	1,898,321	1,640,838
	2,897,329	4,373,431
Net Liabilities		
Net liabilities at beginning of year	(1,588,854)	(666,372)
Cost of operations	(21,285,367)	(19,676,460)
Net transfer from general revenues	22,625,184	18,753,978
	(249,037)	(1,588,854)
	$ 2,648,292	$ 2,784,577

The accompanying notes and schedules are an integral part of these financial statements.

Alberta Legislature
Office of the Auditor General
Statement of Cash Flows
Year Ended March 31, 2012

	2012	2011
Operating transactions:		
Cost of operations	$ (21,285,367)	$ (19,676,460)
Non-cash items included in net operating results:		
Amortization of capital assets	275,380	335,969
	(21,009,987)	(19,340,491)
(Increase) in audit fees receivable	(167,018)	(216,071)
Decrease in other receivables and prepaids	33,274	1,099
(Decrease) Increase in accounts payable and accrued liabilities	(1,733,585)	1,038,521
Increase in accrued vacation pay	257,483	21,617
Net cash used by operating transactions	(22,619,833)	(18,495,325)
Capital transactions:		
Acquisition of capital assets	(5,351)	(258,653)
Financing transactions:		
Net transfer from general revenues	22,625,184	18,753,978
Net cash provided (used)	-	-
Cash, beginning of year	-	-
Cash, end of year	-	-

The accompanying notes and schedules are part of these financial statements.

Alberta Legislature
Office of the Auditor General
Notes to the Financial Statements
Year Ended March 31, 2012

Note 1 Authority and Purpose

The Auditor General is an officer of the Legislature operating under the authority of the *Auditor General Act, Chapter A-46, Revised Statutes of Alberta 2000*. General revenues of the Province of Alberta fund both the cost of operations of the Office of the Auditor General and the purchase of capital assets. The Select Standing Committee on Legislative Offices reviews the Office's annual operating and capital budgets.

The Office of the Auditor General exists to serve the Legislative Assembly and the people of Alberta. The Auditor General is the auditor of all government ministries, departments, funds and provincial agencies, including Alberta Health Services, universities, and public colleges and technical institutes. With the approval of the Assembly's Select Standing Committee on Legislative Offices, the Auditor General may also be appointed auditor of a Crown-controlled corporation or another organization. The results of the Office's work are included in the public reports of the Auditor General presented to the Legislative Assembly.

Note 2 Significant Accounting Policies and Reporting Practices

These financial statements have been prepared in accordance with Canadian public sector accounting standards.

(a) Audit fees

Audit fee revenue is recognized when billable assurance audits are performed. Audit fees are charged to organizations that are funded primarily from sources other than provincial general revenues.

(b) Output costs

Schedule 1 provides detail of our output costs by sector and ministry.

(c) Expenses incurred by others

Services contributed by other entities in support of the Office's operations are disclosed in Note 6.

(d) Capital assets

Capital assets are recorded at cost. Amortization is calculated on a straight-line basis, over the following estimated useful lives of the assets:

Computer hardware	33%
Computer software	33%
Office equipment	10%

(e) Pension expense

Pension costs included as part of these statements refer to employer contributions for the current service of employees during the year and additional employer contributions for service relating to prior years.

(f) Valuation of financial assets and liabilities

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act. The fair values of audit fees receivable, other receivables and prepaids, accounts payable and accrued liabilities and accrued vacation pay are estimated to approximate their carrying values because of the short-term nature of these instruments.

(g) Net liabilities

Net liabilities represent the difference between the Office's liabilities and the carrying value of its assets.

Canadian public sector accounting standards require a "net debt" presentation for the statement of financial position in the summary financial statements of governments. Net debt presentation reports the difference between financial assets and liabilities as "net debt" or "net financial assets" as an indicator of the future revenues required to pay for past transactions and events. The Office operates within the government reporting entity, and does not finance its expenditures by independently raising revenues. Accordingly, these financial statements do not report a net debt indicator.

Note 3 Capital Assets

	2012			2011
	Cost	Accumulated Amortization	Net Book Value	Net Book Value
Computer hardware	$ 1,889,299	$ 1,690,164	$ 199,135	$ 422,214
Computer software	334,262	301,408	32,854	65,966
Office equipment	593,940	520,460	73,480	87,318
	$ 2,817,501	$ 2,512,032	$ 305,469	$ 575,498

Note 4 Defined Benefit Plans

The Office participates in the multi-employer Management Employees Pension Plan, Public Service Pension Plan and Supplementary Retirement Plan for Public Service Managers.

The expense for these pension plans is equivalent to the annual contributions of $1,693,985 for the year ended March 31, 2012 (2010: $1,450,950).

At December 31, 2011, the Management Employees Pension Plan reported a deficiency of $517,726,000 (2010: deficiency $397,087,000), the Public Service Pension Plan reported a deficiency of $1,790,383,000 (2010: deficiency $2,067,151,000) and the Supplementary Retirement Plan for Public Service Managers reported a deficiency of $53,489,000 (2010: deficiency $39,559,000).

The Office also participates in a multi-employer Long Term Disability Income Continuance Plan. At March 31, 2012, the Management, Opted Out and Excluded Plan reported an actuarial surplus of $10,454,000 (2011: surplus $7,020,000). The expense for this Plan is limited to the employer's annual contributions for the year.

Note 5 Budget

The budget shown on the statement of operations is based on the budgeted expenses and the supplemental funding that the Select Standing Committee on Legislative Offices approved on November 26, 2010 and October 13, 2011 respectively. The following table compares the Office's actual expenditures to the approved budgets:

Voted budget	
Operating expenses	$ 22,715,000
Supplementary funding for operating expenses	975,000
	23,690,000
Capital investments	155,000
	23,845,000
Actual	
Operating expenses	23,933,635
Capital investments	5,351
	23,938,986
Over expended	$ (93,986)

Note 6 Expenses Incurred by Others

The Office had transactions with other entities for which no consideration was exchanged. The amounts for these the following transactions are estimated based on the costs incurred by the service provider.

	2012	2011
Expenses incurred by Alberta Infrastructure		
Accommodation	$ 893,498	$ 832,276
Amortization of leasehold improvements	-	5,820
	$ 893,498	$ 838,096
Expense incurred by the Legislative Assembly Office		
Audit fee	$ 29,500	$ 28,700

Note 7 Salaries and Benefits

	2012					
	Pensionable Base Salary	Cash Benefits[1]	Non-cash Benefits[2]	Total	Cashed Out Vacation	Total Including Cashed Out Vacation
Auditor General[3]	$ 222,241	$ 1,250	$ 63,018	$ 286,509	$ 10,218	$ 296,727
Executives:						
Assistant Auditor General[4]	185,472	1,250	51,066	237,788	-	237,788
Assistant Auditor General[5]	179,000	1,250	47,507	227,757	-	227,757
Assistant Auditor General[6]	179,000	46,000	4,768	229,768	-	229,768
Assistant Auditor General[7]	173,000	1,250	46,318	220,568	6,236	226,804
Assistant Auditor General[8]	167,000	1,250	42,948	211,198	-	211,198
	$ 1,105,713	$ 52,250	$ 255,625	$ 1,413,588	$ 16,454	$ 1,430,042

	2011					
	Pensionable Base Salary	Cash Benefits[1]	Non-cash Benefits[2]	Total	Cashed Out Vacation	Total Including Cashed Out Vacation
Auditor General[3]	$ 211,605	$ 1,750	$ 50,507	$ 263,862	$ 20,274	$ 284,136
Executives:						
Assistant Auditor General[4]	180,000	1,750	43,035	224,785	-	224,785
Assistant Auditor General[5]	165,000	1,750	38,495	205,245	-	205,245
Assistant Auditor General[6]	165,000	26,500	4,307	195,807	-	195,807
Assistant Auditor General[7]	159,000	1,750	38,391	199,141	15,230	214,371
Assistant Auditor General[8]	117,299	1,750	27,153	146,202	-	146,202
Assistant Auditor General[9]	43,334	-	12,130	55,464	18,444	73,908
Assistant Auditor General[10]	24,368	-	21,143	45,511	81,996	127,507
	$ 1,065,606	$ 35,250	$ 235,161	$ 1,336,017	$ 135,944	$ 1,471,961

(1) Cash benefits include lump sum payments, payments in lieu of certain employer contributions towards non-cash benefits such as long-term disability insurance and pensions. No bonuses were paid in 2012 and 2011.

(2) Non-cash benefits include the Office's share of all employee benefits, and contributions or payments made on behalf of employees including pension, supplementary retirement plans, health care, dental coverage, group life insurance, short and long term disability plans, WCB premiums, professional memberships and tuition fees.

(3) Automobile provided, no dollar amount included in non-cash benefits

Responsibilities of the executives as at March 31, 2012 as follows:

(4) Energy, Health and Wellness, Human Services, Legislative Assembly, Ministry-Performance Measures and Measuring Up, Seniors

(5) Environment and Water, Executive Council, Intergovernmental, International and Aboriginal Relations, Justice, Service Alberta, Solicitor General and Public Security, Sustainable Resource Development

(6) Advanced Education and Technology, Agriculture and Rural Development, Education, Infrastructure, Transportation, Treasury Board and Enterprise

(7) Corporate Services and Accountability

(8) Culture and Community Spirit, Finance, Municipal Affairs, Tourism, Parks and Recreation. Promoted on July 1, 2010 (9 months in 2011)

(9) Resigned on June 25, 2010 (2.8 months in 2011)

(10) Died on August 29, 2010

Note 8 Comparative Figures

Certain 2011 figures have been reclassified to conform to the 2012 presentation.

Note 9 Approval of the Financial Statements

These financial statements were approved by the Auditor General.

Schedule 1

Alberta Legislature
Office of the Auditor General
Schedule of Output Costs by Sector[1] and Ministry
For the Year Ended March 31, 2012

	2012 Budget			2012 Actual			2011 Actual		
	Stand-alone Systems Audits[2]	Other Audits[3]	Total	Stand-alone Systems Audits	Other Audits	Total	Stand-alone Systems Audits	Other Audits	Total
Cross-Government Issues	$39,000	$287,000	$326,000	$250,000	$277,000	$527,000	$331,000	$422,000	$753,000
Economy									
Advanced Education and Technology	548,000	4,324,000	4,872,000	520,000	4,603,000	5,123,000	436,000	4,212,000	4,648,000
Finance	252,000	3,596,000	3,848,000	231,000	3,558,000	3,789,000	475,000	3,465,000	3,940,000
Infrastructure	-	194,000	194,000	6,000	221,000	227,000	3,000	217,000	220,000
Transportation	152,000	186,000	338,000	432,000	238,000	670,000	120,000	240,000	360,000
Treasury Board and Enterprise	163,000	578,000	741,000	147,000	539,000	686,000	163,000	728,000	891,000
	1,115,000	8,878,000	9,993,000	1,336,000	9,159,000	10,495,000	1,197,000	8,862,000	10,059,000
Health and Wellness									
Human Services	68,000	1,434,000	1,502,000	219,000	1,419,000	1,638,000	194,000	1,302,000	1,496,000
Health and Wellness	783,000	2,602,000	3,385,000	902,000	2,611,000	3,513,000	554,000	2,377,000	2,931,000
Seniors	96,000	545,000	641,000	76,000	515,000	591,000	121,000	433,000	554,000
	947,000	4,581,000	5,528,000	1,197,000	4,545,000	5,742,000	869,000	4,112,000	4,981,000
Public Safety and Community Services[4]									
Culture and Community Services	-	174,000	174,000	-	139,000	139,000	-	147,000	147,000
Education	-	429,000	429,000	9,000	484,000	493,000	60,000	470,000	530,000
Executive Council	-	52,000	52,000	-	46,000	46,000	4,000	48,000	52,000
Intergovernmental, International and Aboriginal Relations	-	167,000	167,000	234,000	165,000	399,000	28,000	138,000	166,000
Justice	-	338,000	338,000	867,000	369,000	1,236,000	151,000	333,000	484,000
Legislative Assembly	-	103,000	103,000	-	206,000	206,000	1,000	119,000	120,000
Municipal Affairs	166,000	568,000	734,000	85,000	533,000	618,000	83,000	545,000	628,000
Service Alberta	1,047,000	682,000	1,729,000	259,000	610,000	869,000	420,000	664,000	1,084,000
Solicitor General and Public Security	34,000	192,000	226,000	20,000	187,000	207,000	53,000	187,000	240,000
Tourism, Parks and Recreation	-	204,000	204,000	-	170,000	170,000	-	162,000	162,000
	1,247,000	2,909,000	4,156,000	1,474,000	2,909,000	4,383,000	800,000	2,813,000	3,613,000
Resources and Environment									
Agriculture and Rural Development	146,000	779,000	925,000	104,000	777,000	881,000	90,000	733,000	823,000
Energy	116,000	720,000	836,000	77,000	786,000	863,000	287,000	782,000	1,069,000
Environment and Water	331,000	338,000	669,000	539,000	332,000	871,000	190,000	332,000	522,000
Sustainable Resource Development	274,000	303,000	577,000	120,000	327,000	447,000	146,000	350,000	496,000
	867,000	2,140,000	3,007,000	840,000	2,222,000	3,062,000	713,000	2,197,000	2,910,000
	$4,215,000	$18,795,000	$23,010,000	$5,097,000	$19,112,000	$24,209,000	$3,910,000	$18,406,000	$22,316,000

[1] We have aligned our ministry audit work with the Policy Field Committees as of March 31, 2012.
[2] Stand-alone systems audits are audits of major programs or initiatives an organization undertakes to achieve its goals.
[3] Other audits comprises auditing of financial statements, compliance with authorities, performance measures, results analysis, and systems, and research/advice.
[4] This sector merges the Policy Field Committees for Community Services and Public Safety and Services.

Schedule 2

Alberta Legislature
Office of the Auditor General
Other Performance Information

Performance measures		Target 2011–12	Actual 2011–2012	Actual 2010–2011
Relevant auditing				
1.a	The percentage of the Auditor General's primary recommendations accepted.[1]	95%	**100%**	100%
1.b	The number of the Auditor General's primary recommendations not implemented within 3 years of acceptance.	None	**42**	43
1.c	Issue our auditor's report on the consolidated financial statements of the Province by June 30th each year.	June 30	**June 23, 2011**	June 22, 2010
1.d	The percentage of costs dedicated to stand-alone systems auditing/other auditing.	20/80%	**21/79%**	18/82%
1.e	The percentage of Members of the Legislative Assembly who believe our work is valuable.	TBD	**Inadequate response rate to draw conclusion**[2]	N/A
Reliable auditing				
2.a	Institute of Chartered Accountants of Alberta conclusion that Office's assurance audit practice meets auditing standards.[3]	N/A	**N/A**	N/A
Reasonable cost auditing				
3.a	Staff turnover rate	Less than 20%	**22%**	18%
3.b	Benchmarking average hourly audit costs	TBD	**Under development**	Under development

[1] Acceptance does not include recommendations accepted in principle or under review

[2] Response rate of 23 out of 83 MLAs or 28 per cent

[3] The review is required every three years and will be conducted again in 2012–2013

Glossary

Report of the Auditor General of Alberta—October 2012

Accountability	In governance, the responsibility of an organization (government, ministry, department or other entity) to: • report results (what they spent, and what they achieved) • compare results with plans, budgets or goals • explain any difference between the actual and expected results Government accountability allows Albertans to decide whether the government is doing a good job. They can compare the costs and benefits of government action: what it spends, what it tries to do (goals) and what it achieves (results).
Accrual basis of accounting	A way of recording financial transactions that puts revenues and expenses in the period when they are earned and incurred.
Adverse auditor's opinion	An auditor's opinion that things audited do not meet the criteria that apply to them.
Assurance	An auditor's written conclusion about something audited. Absolute assurance is impossible because of several factors, including the nature of judgement and testing, the inherent limitations of control and the fact that much of the evidence available to an auditor is only persuasive, not conclusive.
Attest work, attest audit	Work an auditor does to express an opinion on the reliability of financial statements.
Audit	An auditor's examination and verification of evidence to determine the reliability of financial information, to evaluate compliance with laws or to report on the adequacy of management systems, controls and practices.
Auditor	A person who examines systems and financial information.
Auditor's opinion	An auditor's written opinion on whether things audited meet the criteria that apply to them.
Auditor's report	An auditor's written communication on the results of an audit.
Business case	An assessment of a project's financial, social and economic impacts. A business case is a proposal that analyzes the costs, benefits and risks associated with the proposed investment, including reasonable alternatives. The province has issued business case usage guidelines and a business case template that departments can refer to in establishing business case policy.
Capital asset	A long-term asset.
COBIT	Abbreviation for Control Objectives for Information and Related Technology. COBIT provides good practices for managing IT processes to meet the needs of enterprise management. It bridges the gaps between business risks, technical issues, control needs and performance measurement requirements.
COSO	Abbreviation for Committee of Sponsoring Organizations of the Treadway Commission. COSO is a joint initiative of five major accounting associations and is dedicated to development of frameworks and guidance on risk management, internal control and fraud deterrence.
Criteria	Reasonable and attainable standards of performance that auditors use to assess systems or information.
Cross-ministry	The section of this report covering systems and problems that affect several ministries or the whole government.
Crown	Government of Alberta
Deferred contributions	See "Restricted contributions."

Deferred maintenance	Any maintenance work not performed when it should be. Maintenance work should be performed when necessary to ensure capital assets provide acceptable service over their expected lives.
Enterprise risk management (ERM)	The systems and processes within an organization used to identify and manage risks so it can achieve its goals and objectives. An ERM creates linkages between significant business risks and possible outcomes so that management can make informed decisions. An ERM framework helps organizations identify risks and opportunities, assess them for likelihood and magnitude of impact, and determine and monitor the organization's responses and actions to mitigate risk. A risk-based approach to managing an enterprise includes internal controls and strategic planning.
Enterprise resource planning (ERP)	Abbreviation for enterprise resource planning. ERPs integrate and automate all data and processes of an organization into one comprehensive system. ERPs may incorporate just a few processes, such as accounting and payroll, or may contain additional functions such as accounts payable, accounts receivable, purchasing, asset management, and/or other administrative processes. ERPs achieve integration by running modules on standardized computer hardware with centralized databases used by all modules.
Exception	Something that does not meet the criteria it should meet—see "Auditor's opinion."
Expense	The cost of a thing over a specific time.
IFRS	International Financial Reporting Standards (IFRS) are global accounting standards, adopted by the Accounting Standards Board of the Canadian Institute of Chartered Accountants. They are required for government business enterprises for fiscal years beginning on or after January 1, 2011.
GAAP	Abbreviation for "generally accepted accounting principles," which are established by the Canadian Institute of Chartered Accountants. GAAP are criteria for financial reporting.
Governance	A process and structure that brings together capable people and relevant information to achieve goals. Governance defines an organization's accountability systems and ensures effective use of public resources.
Government business enterprise	A commercial-type enterprise controlled by government. A government business enterprise primarily sells goods or services to individuals or organizations outside government, and is able to sustain its operations and meet its obligations from revenues received from sources outside government.
Internal audit	A group of auditors within a ministry (or an organization) that assesses and reports on the adequacy of the ministry's internal controls. The group typically reports its findings directly to the deputy minister or governing board. Internal auditors need an unrestricted scope to examine business strategies, internal control systems, compliance with policies, procedures, and legislation, economical and efficient use of resources and effectiveness of operations.
Internal control	A system designed to provide reasonable assurance that an organization will achieve its goals. Management is responsible for an effective internal control system in an organization, and the organization's governing body should ensure that the control system operates as intended. A control system is effective when the governing body and management have reasonable assurance that: • they understand the effectiveness and efficiency of operations • internal and external reporting is reliable • the organization is complying with laws, regulations and internal policies
Management letter	Our letter to the management of an entity that we have audited. In the letter, we explain: 1. our work 2. our findings 3. our recommendation of what the entity should improve 4. the risks if the entity does not implement the recommendation We also ask the entity to explain specifically how and when it will implement the recommendation.

Material, materiality	Something important to decision makers.
Misstatement	A misrepresentation of financial information due to mistake, fraud or other irregularities.
Outcomes	The results an organization tries to achieve based on its goals.
Outputs	The goods and services an organization actually delivers to achieve outcomes. They show “how much” or “how many.”
Performance measure	Indicator of progress in achieving a goal.
Performance reporting	Reporting on financial and non-financial performance compared with plans.
Performance target	The expected result for a performance measure.
PSAB	Abbreviation for Public Sector Accounting Board, the body that sets public sector accounting standards.
PSAS	Abbreviation for public sector accounting standards, which are applicable to federal, provincial, territorial and local governments.
Qualified auditor’s opinion	An auditor’s opinion that things audited meet the criteria that apply to them, except for one or more specific areas—which cause the qualification.
Recommendation	A solution we—the Office of the Auditor General of Alberta—propose to improve the use of public resources or to improve performance reporting to Albertans.
Restricted contributions	Canadian accounting standards for not-for-profit organizations require externally restricted contributions to be accounted for by reporting the value of contributions as liabilities until the stipulations are met, after which they are recognized as revenue. Externally restricted contributions for which the stipulations have not been met are called “deferred contributions.” The purpose of this accounting is to provide readers of the financial statements with useful information about how management has used resources provided to them and whether or not they have complied with stipulations imposed by donors.
Review	Reviews are different from audits in that the scope of a review is less than that of an audit and therefore the level of assurance is lower. A review consists primarily of inquiry, analytical procedures and discussion related to information supplied to the reviewer with the objective of assessing whether the information being reported on is plausible in relation to the criteria.
Risk	Anything that impairs an organization’s ability to achieve its goals.
Sample	A sample is a portion of a population. We use sampling to select items from a population. We perform audit tests on the sample items to obtain evidence and form a conclusion about the population as a whole. We use either statistical or judgemental selection of sample items, and we base our sample size, sample selection and evaluation of sample results on our judgement of risk, nature of the items in the population and the specific audit objectives for which sampling is being used.
Standards for systems audits	Systems audits are conducted in accordance with the assurance and value-for-money auditing standards established by the Canadian Institute of Chartered Accountants.
Systems (management)	A set of interrelated management control processes designed to achieve goals economically and efficiently.
Systems (accounting)	A set of interrelated accounting control processes for revenue, spending, preservation or use of assets and determination of liabilities.

Systems audit To help improve the use of public resources, we audit and recommend improvements to systems designed to ensure value for money.

Paragraphs (d) and (e) of subsection 19(2) of the *Auditor General Act* require us to report every case in which we observe that:

- an accounting system or management control system, including those designed to ensure economy and efficiency, was not in existence, or was inadequate or not complied with, or
- appropriate and reasonable procedures to measure and report on the effectiveness of programs were not established or complied with.

To meet this requirement, we do systems audits. Systems audits are conducted in accordance with the auditing standards established by the Canadian Institute of Chartered Accountants.

First, we develop criteria (the standards) that a system or procedure should meet. We always discuss our proposed criteria with management and try to gain their agreement to them. Then we do our work to gather audit evidence. Next, we match our evidence to the criteria. If the audit evidence matches all the criteria, we conclude the system or procedure is operating properly. But if the evidence doesn't match all the criteria, we have an audit finding that leads us to recommend what the ministry must do to ensure that the system or procedure will meet all the criteria. For example, if we have five criteria and a system meets three of them, the two unmet criteria lead to the recommendation.

A systems audit should not be confused with assessing systems with a view to relying on them in an audit of financial statements.

Unqualified auditor's opinion An auditor's opinion that things audited meet the criteria that apply to them.

Unqualified review engagement report Although sufficient audit evidence has not been obtained to enable us to express an auditor's opinion, nothing has come to our attention that causes us to believe that the information being reported on is not, in all material respects, in accordance with appropriate criteria.

Value for money The concept underlying a systems audit is value for money. It is the "bottom line" for the public sector, analogous to profit in the private sector. The greater the value added by a government program, the more effective it is. The fewer resources used to create that value, the more economical or efficient the program is. "Value" in this context means the impact that the program is intended to achieve or promote on conditions such as public health, highway safety, crime or farm incomes. To help improve the use of public resources, we audit and recommend improvements to systems designed to ensure value for money.

Other resources

The Canadian Institute of Chartered Accountants (CICA) produces a useful book called, *Terminology for Accountants*. They can be contacted at CICA, 277 Wellington Street West, Toronto, Ontario, Canada M5V 3H2 or www.cica.ca.

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