# Report of the Auditor General to the Nova Scotia House of Assembly

## November 2013

Independence • Integrity • Impact

October 31, 2013

Honourable Kevin Murphy
Speaker
House of Assembly
Province of Nova Scotia

Dear Sir:

I have the honour to submit herewith my Report to the House of Assembly under Section 18(2) of the Auditor General Act, to be laid before the House in accordance with Section 18(4) of the Auditor General Act.

Respectfully submitted

JACQUES R. LAPOINTE, CA

Auditor General

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# Office of the Auditor General

## Our Vision

A relevant, valued and independent audit office serving the public interest as the House of Assembly's primary source of assurance on government performance.

## Our Mission

To make a significant contribution to enhanced accountability and performance in the provincial public sector.

## Our Priorities

Conduct and report audits that provide information to the House of Assembly to assist it in holding government accountable.

Focus our audit efforts on areas of higher risk that impact on the lives of Nova Scotians.

Contribute to a better performing public service with practical recommendations for significant improvements.

Encourage continual improvement in financial reporting by government.

Promote excellence and a professional and supportive workplace at the Office of the Auditor General.

# Who We Are and What We Do

The Auditor General is an independent nonpartisan officer of the Legislature, appointed by the House of Assembly for a ten-year term. He or she is responsible to the House for providing independent and objective assessments of the operations of government, the use of public funds, and the integrity of financial reports. The Auditor General helps the House to hold the government to account for its use and stewardship of public funds.

The Auditor General Act establishes the Auditor General's mandate, responsibilities and powers. The Act provides his or her Office with a modern performance audit mandate to examine entities, processes and programs for economy, efficiency and effectiveness and for appropriate use of public funds. It also clarifies which entities are subject to audit by the Office.

The Act stipulates that the Auditor General shall provide an opinion on government's annual consolidated financial statements; provide an opinion on the revenue estimates in the government's annual budget address; and report to the House at least annually on the results of the Office's work under the Act.

The Act provides the Office a mandate to audit all parts of the provincial public sector, including government departments and all agencies, boards, commissions or other bodies responsible to the crown, such as regional school boards and district health authorities, as well as funding recipients external to the provincial public sector. It provides the Auditor General with the authority to require the provision of any documents needed in the performance of his or her duties.

In its work, the Office of the Auditor General is guided by, and complies with, the professional standards established by the Canadian Institute of Chartered Accountants, otherwise known as generally accepted auditing standards. We also seek guidance from other professional bodies and audit-related best practices in other jurisdictions.

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# Introduction

# 1 Message from the Auditor General

## Introduction

1.1    I am pleased to present my November 2013 Report to the House of Assembly on work completed by my Office in the summer and fall of 2013.

1.2    In the last six months I have submitted the following reports.

- My Report to the House of Assembly on work completed by my Office in early 2013, dated May 1, 2013, was tabled on May 22, 2013.

- My Business Plan for 2013-14, and my Report on Performance for 2012-13 were provided to the Public Accounts Committee on May 28, 2013 and July 11, 2013 respectively.

- My Report on the Province's March 31, 2013 consolidated financial statements, dated July 25, 2013, was tabled with the Public Accounts by the Minister of Finance on July 31, 2013.

- My Review of MLA Samson's Entitlement to Benefits as an Outside Member, dated July 29, 2013, was tabled on August 2, 2013.

1.3    I wish to acknowledge the valuable efforts of my staff who deserve the credit for the work reported here.  As well, I wish to acknowledge the cooperation and courtesy we received from staff in departments and agencies during the course of our work.

## Chapter Highlights

1.4    This report presents the results of audits completed in 2013 at a number of departments.

### Performance Audits

*Chapter 2 –  Government-wide:  Controls Over Disposal of IT Assets*

1.5    The provincial government does not have adequate data security and inventory controls to prevent sensitive information from being exposed when information technology assets are disposed of and sent for reuse elsewhere – primarily in the public education system.  Computers issued to government employees are not configured to encrypt the data on their hard drives.

Government does not have a complete inventory record of its information technology assets. Reconciliations of physical IT assets to inventory records are not performed. There is no validation that all computers sent for secure wiping were actually wiped. Policies and procedures do not have enough detail to provide sufficient guidance in the protection of sensitive data and secure disposal of information technology assets.

### Chapter 3 – Economic and Rural Development and Tourism: Funding Programs

1.6     The funding programs we examined at the Department of Economic and Rural Development and Tourism are not well-managed. The Department has not taken sufficient action to address the concerns identified in our 2011 audit of the Industrial Expansion Fund. Although a process guide was developed, it is not consistently followed. We also found many issues with the projects we examined in the Strategic Initiatives Program. Overall, we identified a lack of monitoring of approved projects to verify that funds were spent as intended.

### Chapter 4 – Health and Wellness: Public Health Surveillance

1.7     Although the Department of Health and Wellness has made improvements in recent years, significant changes are still needed to move Nova Scotia to an adequate public health surveillance system. Current information systems have limited functionality because they do not support detailed analysis of disease data. This makes it harder to understand increases in specific diseases or outbreaks. Staff often rely on paper files for detailed information; this can cause delays searching for files in an outbreak. Additionally, the surveillance system does not address other areas of public health such as indicators of overall population health.

### Chapter 5 – Labour and Advanced Education: Occupational Health and Safety

1.8     We found the Department of Labour and Advanced Education's investigations into serious workplace accidents are adequate. However, there was insufficient evidence in inspection files to determine whether occupational health and safety inspections were adequately carried out. Orders issued by inspectors to address health and safety weaknesses are not adequately followed up to ensure corrective action is taken. Improvements in operational planning and monitoring are also needed to ensure high-risk workplaces are targeted for inspections.

# Performance Audits

# 2 Government-wide: Controls Over Disposal of IT Assets

## Summary

Government does not have adequate data security and inventory controls to prevent sensitive information from being exposed when information technology assets are disposed of and sent for reuse elsewhere – primarily in the public education system.

Computers issued to government employees are not configured to encrypt the data on their hard drives. Chief Information Office staff told us they intend to do this, but they do not have an implementation plan or timeline for this project.

Government's inventory of information technology assets is not managed appropriately. Policies and procedures do not have enough detail to provide sufficient guidance in the protection of sensitive data and secure disposal of information technology assets. Responsibilities for tracking information technology assets are not adequately communicated; some departments do not track their assets even though they are responsible for the data stored in them. Government has no processes to maintain the accuracy of inventory records. The Inventory Control Policy does not reflect the current inventory management structure or the increased risks associated with IT assets. Reconciliations of physical IT assets to inventory lists are not performed. We identified computers on inventory lists that were very difficult to locate; in one instance the computer was not found.

Government does not have a complete inventory record of its information technology assets. Some departments purchase their own IT assets; others request them from the Chief Information Office. In 2012, Chief Information Office staff started recording the purchases they made and disposals they performed. The computers purchased prior to that time, as well as those not purchased by CIO, may not be recorded. Without changes to the inventory tracking process, it is possible that the inventory will never be the complete.

We identified deficiencies with the processes used to dispose of surplus computers. There is no validation that all computers sent for secure wiping were actually wiped. The Chief Information Office does not tag all computers that have been wiped to identify computers ready to be sent for reuse. We identified five computers designated for reuse that were not wiped; one of which contained sensitive information.

The software used to wipe hard drives is not meant for business use. It does not provide an audit record or validation that a drive has been successfully erased. The validation could be done manually, but it is not.

# 2 Government-wide: Controls Over Disposal of IT Assets

## Background

2.1 There are numerous costs associated with the loss or misplacement of information technology (IT) assets in government. Examples include replacement cost, costs to set up and re-issue a replacement asset, and the cost of the loss of employee productivity. There may also be a risk of exposure of the data contained on that IT asset. If the lost asset contains sensitive information such as financial, health, education or legal records, especially if any can be attributed to specific individuals, an unauthorized disclosure of data could have significant ramifications, including legal costs and damage to reputation. Affected members of the public would also be at risk, the scope of which would depend on the information disclosed.

2.2 The risk of improper disclosure of sensitive information can be reduced by using multiple layers of security, which provides extra protection if one security measure fails. Examples include encryption, tracking the assets that contain the information and securely wiping hard drives before disposal. Encryption is the process of scrambling data so that it can only be decoded and read by someone with the proper password.

2.3 Proper inventory management for computers tracks all such assets throughout their lifecycle. This enables management to detect if data storage devices become misplaced. Key events and information that should be recorded include the following.

- Purchasing – the primary users and the serial numbers of new assets

- Maintaining – changes of owners, location or primary use

- Disposing – the date the asset is removed from service, steps taken to secure the data, and the asset's final destination

2.4 Data disclosure risks are further mitigated by securely wiping hard drives. Even though data may be deleted from hard drives by users, that information may be readable through the use of data recovery tools. Sanitization (secure wiping) of hard drives is meant to prevent recovery of such data. The Province requires all computer hard drives be securely wiped before releasing the computers for reuse elsewhere.

2.5 The Department of Transportation and Infrastructure Renewal has a central computerized inventory tracking application which can be used for IT assets throughout government. Transportation staff provide training to departments

choosing to use the application.  They are also responsible for collecting and reporting annually on government inventory that has been deemed surplus.

2.6     The Chief Information Office (CIO) provides computer acquisition and disposal services to government departments as requested. If a department uses the CIO for acquisition or disposal, that action is recorded in Transportation's central inventory system.

2.7     CIO sends surplus computers to Computers for Schools.  Computers for Schools is a nonprofit organization that accepts donations of computer equipment from various levels of government and businesses.  Donated equipment is refurbished and distributed, mostly within the Nova Scotia public education system.  According to a government news release, the list of donated equipment for fiscal year 2011-12 included 1,381 desktops, 270 laptops, and hundreds of accessories such as keyboards, monitors, printers, speakers and computer mice.

## Audit Objective and Scope

2.8     In the summer of 2013, we completed an audit of controls over secure disposal of information technology assets.  The objectives of our audit were to:

- assess the adequacy of internal controls in core government to appropriately manage the inventory of information technology assets; and

- assess the adequacy of internal controls in core government to ensure sensitive information has been securely deleted from specified information technology assets before their reuse or disposal.

2.9     Devices in use by government which may contain sensitive data include the following.

- Computer hard drives

- Server hard-drives and network-attached storage devices

- Photocopiers and printers

- Smartphones and tablets

- USB drives

2.10   We considered the risk of data loss and decided to focus our audit testing mainly on computer hard drives and smart phones.

2.11    Audit criteria were developed specifically for this engagement using both internal and external sources.  We examined policies, processes and controls within Transportation and Infrastructure Renewal and Chief Information Office to manage the inventorying, secure wiping, and disposal of information technology assets.  We tested IT asset inventory practices at a sample of departments: Health and Wellness, Justice, and Community Services.

2.12    The audit objectives and criteria were discussed with, and accepted as appropriate by, members of management responsible for the systems we audited.

2.13    Audit fieldwork was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.  We carried out fieldwork between October 2012 and May 2013 on IT process transactions that occurred between January 1, 2012 and December 31, 2012.  Adequacy of controls over disposals was assessed at various points throughout fieldwork.

## Significant Audit Observations

### Encryption

Conclusions and summary of observations

Information contained on provincial government laptop and desktop computer hard drives is at an unnecessarily high risk of improper disclosure.  Computers used by government employees do not have data on their hard drives encrypted and the Chief Information Office has not established a timeline to implement encryption.

2.14    *Computer hard drives* – Currently, laptop and desktop computers used by provincial government employees do not have encrypted hard drives.  If these devices are misplaced, unauthorized individuals could read the hard drives, which may expose sensitive information.  The Chief Information Office intends to encrypt the data on all government computer hard drives, but has not established a timeline or implementation plan.  Therefore, reliance is mostly placed on the inventory management process to account for IT assets and the process of securely deleting the information contained in them upon disposal.

*Recommendation 2.1*
*The Chief Information Office should ensure all computers issued to government employees are configured to encrypt their data.*

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation and intends to encrypt the data on all computers issued to government employees.  An implementation plan will be developed to determine the timeline and any funding requirements and human resource implications.*

2.15   *Smartphones* – The Province will only allow government-issued Blackberry smartphones to connect to the provincial network.  Upon activation, these devices download a security policy which encrypts the device and requires a password at all times.  These Blackberries can be wiped remotely if lost or stolen and have a password attempt limit of 10 before triggering an automatic wipe of the device.  These security features mitigate the risk of data loss on government smartphones.

2.16   We found surplus smartphones awaiting destruction at the government surplus warehouse.  We tested 46 phones and only found four that were not locked.  These smartphones were in service before passwords were mandatory.  We found emails stored on them.  However, in turning the smartphones on, they connected to government computers which triggered an automatic wipe.  None of the information could then be retrieved.

## Information Technology Inventory Management

Conclusions and summary of observations

Information technology inventories are not adequately managed, increasing the risk of sensitive information stored on those devices being inadvertently exposed.  Government does not have a complete and accurate record of all of its information technology assets.  We found inaccuracies in each of the inventory lists we tested.  Departments are not reconciling physical IT assets to asset lists.  Further, accountabilities for information technology asset inventory management have not been communicated.

2.17   *Background* – IT asset inventory management is the process of tracking and accounting for all significant IT assets throughout their lifecycle.  When new IT assets are purchased, the documentation to support the purchase should be retained and certain information about the asset should be recorded, such as serial number, its location, and to whom it was issued.  If IT assets change location or owner, inventory records should be updated.  Departments should periodically reconcile physical assets to inventory listings to ensure records are accurate and all assets owned are accounted for.  When an IT asset is at the end of its useful life, stored data should be securely wiped before the asset is discarded and inventory records should be updated to reflect this important safeguard.

2.18 *Responsibilities for IT inventories* – The government's Information Management Policy stipulates that departments are responsible to protect information contained on their IT assets. Departments are also charged with tracking assets, including IT equipment, as noted in government's Inventory Control Policy. Currently, CIO staff only record IT asset purchase and disposal information. Once deployed, tracking the asset and the data on it become the responsibility of the receiving department. We found that none of the departments we tested knew it was their responsibility to keep this information up-to-date. There is no clear understanding by all parties as to who is responsible for which aspect of inventory tracking. This is discussed in greater detail in the Inventory Legislation and Policies section later in this chapter.

2.19 *Departmental processes* – There is a government-wide electronic inventory system available to all government departments, agencies, boards and commissions to use in tracking their capital asset inventory. The Department of Transportation and Infrastructure Renewal provides training to departments upon request, but departments are not required to use this application to track their assets.

2.20 In 2012, CIO began using this centralized inventory system to record all IT asset purchases made on behalf of departments. Since assets purchased earlier may not be recorded in the system, and because departments are not required to purchase IT assets through CIO, it is possible that the inventory listing may never be complete.

2.21 CIO has an on-line process through which most departments order computers. However, not all departments purchase computers through CIO. Of the three departments we examined, both Health and Wellness, and Justice utilize CIO's purchasing service. The Department of Community Services manages its own IT inventory, including purchasing.

2.22 The Department of Health and Wellness relies on the CIO to purchase and dispose of its computers, and to record those activities in the centralized inventory system. The Department does not track its own inventory of computers and relies on reports provided by CIO. Those reports are based on identifying computers that have connected to the provincial network in the last 120 days. If there are computers which have not been connected to the network during this time period, the list will not be complete. This identification method cannot be relied upon as an accurate method of inventory management.

*Recommendation 2.2*
*The Department of Health and Wellness should develop and implement a process to ensure its information technology asset inventory records are complete and accurate.*

***Department of Health and Wellness Response:***
*The Department of Health and Wellness is in agreement with the recommendation and will work in conjunction with other key departments including the Department of Transportation and Infrastructure Renewal and the Chief Information Office to develop and implement a process to ensure its information technology asset inventory records are complete and accurate.  The Department of Health and Wellness expects to have this in place by November 2014.*

2.23    Currently, the CIO maintains records of Justice's IT asset purchases and disposals in government's central inventory system.  Prior to 2013, the CIO maintained a separate inventory database for that Department's IT assets. The database was owned and maintained by Justice until the CIO was established, at which point the CIO continued to maintain the database. The database will be phased out when the assets recorded in it reach the end of their lifecycle.  We tested the accuracy of both the database and the central inventory list.  We found that neither inventory was accurate.

- 18 of 20 sample assets which were removed from use per the Department's database had not been recorded as such in the central inventory list.

- Six of 10 sample purchases made between April and December 2012 were not recorded in the Department's database.

***Recommendation 2.3***
***The Department of Justice should develop and implement a process to ensure its information technology asset inventory records are complete and accurate.***

***Department of Justice Response:***
*The Department of Justice will work with both the Chief Information Office and Transportation and Infrastructure Renewal to improve the way information technology assets are tracked.  The Department will implement a policy requiring divisions to keep a master list of Blackberries and cell phones authorized for use by staff and record when the asset is replaced and the old asset destroyed or returned for surplus.  In addition, a policy will be implemented addressing the process to be followed when assets are replaced, either through Evergreen or one off replacements, and the removing of assets from the network.  The Department of Justice expects to have this in place by the end of the current fiscal year.*

2.24    The Department of Community Services does not use the CIO to purchase its IT assets, and it does not use the central inventory system to track them.  The Department retains purchase orders, packing slips and invoices in binders for each fiscal year, and the assets procured and disposed of are tracked in spreadsheets.  The Department does use the CIO disposal service for its computers.

2.25   While Community Services does have a process to track its IT assets, we noted the following issues with the spreadsheet used to record this information.

- 2 of 20 sample purchase orders were not recorded.

- 8 of 20 sample computers connected to the Department's networks were not recorded.

- 1 of 20 sample purchase orders tested was incorrectly recorded.

- Serial numbers were not recorded for 40 assets in the system.

*Recommendation 2.4*
*The Department of Community Services should develop and implement a process to ensure its information technology asset inventory records are complete and accurate.*

*Department of Community Services Response:*
*The Department of Community Services agrees with this recommendation and will work with the Chief Information Office to implement a process that will ensure the Department's information technology inventory records are complete and accurate from time of procurement to disposal.  This work will be completed within this fiscal year.*

2.26   *Inventory reconciliation* – Based on our testing and discussions with management at Transportation and Infrastructure Renewal, departments are not reconciling their IT assets and inventory records.  We selected a sample of computers from inventory listings and attempted to physically locate them.  We identified one computer purchased by the Department of Community Services and four by the Department of Justice that could not be readily located.  Four of the computers were eventually found; one was never located.  If that asset was not processed through government's secure disposal procedures, there is an increased chance that the hard drive has not been securely wiped.  The lack of reconciliations increases the risk that IT assets with sensitive government information have been disposed of without securely wiping the hard drive and that information could be exposed.  All departments should be required by government policy to reconcile their IT inventory lists to the actual items on hand.  This is addressed later in this chapter.

2.27   *Smartphones* – Smartphones are used throughout government and have the capacity to hold large amounts of sensitive information, such as emails and related attachments.  We found that departments have varying processes to manage smartphone inventories.  However, security features are enabled on all devices which mitigates the risk of data loss.  It is expected that recommendations made in this chapter to improve information technology asset inventory processes would include smartphone assets, providing further protection for government data.

## Inventory Management Software – Application Controls

### Conclusions and summary of observations

The applications used by the Department of Community Services and the Department of Justice do not have adequate application controls to maintain the accuracy of the inventory records contained within them. The inventory system provided by the Department of Transportation and Infrastructure Renewal and used by the Chief Information Office has some controls, however additional safeguards should be in place.

2.28   *Inventory applications controls* – Inventory tracking systems used by departments should have safeguards to restrict what users can do within the application. These are commonly referred to as application controls. This enables management to rely on the accuracy of information in the application. If users are able to delete or modify records without authorization, they could potentially change details about inventory items or remove IT assets without being detected.

2.29   We assessed the systems used by our sample departments against application controls we would expect to be in place to protect the accuracy of data. Based on this assessment, we found inventory applications did not have adequate controls. Application controls should be implemented to mitigate risks relating to the accuracy of data in the inventory applications we examined. The table below summarizes our testing results.

| Application Control | Transportation and Infrastructure Renewal Centralized System | System Used by Department of Community Services | System Used by Department of Justice |
|---|---|---|---|
| Users are required to authenticate themselves through a username and password | ✓ | ✓ | X |
| User accounts are locked out if username or password attempts are invalid after a specified number of times | X | X | X |
| Permissions can be assigned to restrict access to functions such as creating, modifying and deleting records | ✓ | X | X |
| Logs are generated when a user creates, updates, transfers or deletes a record | X | X | X |
| User accounts expire or are disabled after a period of inactivity | X | X | X |
| Passwords are required to be changed periodically | X | X | X |

2.30  As discussed earlier, the Department of Justice's inventory system is being phased out as it transitions to Transportation and Infrastructure Renewal's central inventory system.  New inventory is not recorded in the old system.  Accordingly, we do not recommend any changes to this system.

*Recommendation 2.5*
*The Department of Community Services should utilize an inventory management application that prevents unauthorized access through strong password control; prevents authorized users from performing unauthorized transactions; logs all user activity; and disables accounts when they become dormant.*

*Department of Community Services Response:*
*The Department of Community Services accepts this recommendation and will transition to use the Department of Transportation and Infrastructure Renewal's centralized inventory management system that meets most of the application controls outlined in this report. This work will be completed within the fiscal year.*

*Recommendation 2.6*
*The Department of Transportation and Infrastructure Renewal should administer a central inventory management application that prevents unauthorized access through strong password control; prevents authorized users from performing unauthorized transactions; logs all user activity; and disables accounts when they become dormant.*

*Department of Transportation and Infrastructure Renewal Response:*
*The Department of Transportation and Infrastructure Renewal agrees with the recommendation of the Auditor General.  The Department will be upgrading to the latest version of Archibus V21.1 which will address the issues raised.*

## Information Technology Asset Disposal

Conclusions and summary of observations

Standards related to information security need improvement and procedures for information technology asset disposal should be documented.  There are weaknesses in the process to wipe hard drives, including use of inadequate software, lack of identification labels for wiped computers, and no verification that computers have been wiped.  Departments are not listing the computers they need wiped by CIO and they do not receive any documentation back as to which computers were wiped.  More detailed information needs to be recorded in the inventory records for disposed assets and additional procedures are needed to ensure all disposals are recorded.

2.31   *Secure disposal* – When a provincial government IT asset is declared surplus, the government's Wide Area Network Security Policy and supporting standards require any sensitive information on it to be deleted in a secure manner.  However, there is no indication which asset categories are covered by the policy.  Additionally, it does not refer to government's Information Management Policy which requires departments to classify information into its various types as well as safeguard information from improper disclosure, use, disposition and destruction.

**Recommendation 2.7**
**The Chief Information Office should modify the standards that support the Wide Area Network Security Policy to indicate the categories of information technology assets covered by the policy and to reference its relationship to government's Information Management Policy.**

**Chief Information Office Response:**
*The Chief Information Office agrees with this recommendation.  The Chief Information Office understands that updating the Wide Area Network Security Standards will address this recommendation.  This is already in process.*

2.32   CIO IT asset disposal services are available to all provincial departments. Government policy requires all electronic storage devices to be securely wiped.  If hard drives cannot be securely wiped, they must be destroyed. Departments are to notify CIO when there are IT assets to be disposed of and a staff member from CIO performs the secure wipe.  The wiped computers are sent to Computers for Schools (see Background section).  Hard drives that cannot be wiped (e.g., nonfunctional drives) are removed and sent for destruction at a metal shredding facility.  Currently, smartphones also must be shredded because they cannot be reused for security reasons.

2.33   While there is a process for secure IT asset disposal, it is not documented. Written procedures are necessary to ensure consistency of processes and continuity in the event of the departure of key staff members.  Departments using CIO's disposal service should be provided information on the secure wipe process and related responsibilities. This would assist them in fulfilling their responsibility to protect the security of the sensitive information they handle.

**Recommendation 2.8**
**The Chief Information Office should document its information technology asset disposal process indicating the procedures, responsibilities and service contacts involved.  This documentation or a summary of it should be provided to departments that use the Office's disposal service.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation.  Work is already underway in documenting the procedures, responsibilities, and service contacts for the asset disposal service.*

2.34  *Secure wiping* – Secure wiping of hard drives (digital sanitization) is especially important because government hard drives are not encrypted and therefore do not have the first layer of data security discussed earlier in this chapter. We assessed the CIO's process to securely wipe information from hard drives and noted the following deficiencies.

- The software used by the CIO is not intended for business use and does not maintain logs, leaving no means of validating that a hard drive was wiped or to assist when investigating a data security breach.

- There is no standard identification method (e.g., label) to indicate that a device has been successfully wiped.

- There is no periodic verification that computers sent for disposal were wiped.

2.35  We tested a sample of 100 computers that were designated as surplus and therefore should have had their hard drives wiped.  Five of these computers contained information which was easily readable, proving they had not been wiped.  One contained sensitive information, including recorded 911 calls, very personal details relating to a background check, and other personal information.   These computers would have been sent to Computers for Schools, with sensitive information still accessible.

*Recommendation 2.9*
**The Chief Information Office should use sanitization (secure wiping) software that records and reports information on wipe processes and results.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation.  The Chief Information Office will investigate a solution for sanitization with appropriate audit and reporting capabilities.  An implementation plan will be developed to determine the timeline and any funding requirements and human resource implications.*

*Recommendation 2.10*
**The Chief Information Office should implement a standard procedure that provides a visual identification of whether information technology assets have been wiped.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation. Changes are being implemented to the existing processes to ensure hard drives that have been wiped are clearly identifiable.*

**Recommendation 2.11**
**The Chief Information Office should periodically verify that computers sent for disposal were wiped.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation. Procedures are being modified to provide for periodic verification that computers sent to the Chief Information Office for disposal were wiped in accordance with the Chief Information Office policy and procedures.*

2.36 *Destruction of data storage devices* – Data storage devices that cannot be securely wiped are required to be physically destroyed. The destruction process is witnessed by a CIO employee and photo evidence of the destruction is retained.

2.37 Departments can choose to have their hard drives destroyed instead of reused. This is the case at the Department of Justice for computers and other devices used by judges and their support staff. Justice requires that all hard drives from these devices be removed and physically destroyed upon retirement of an asset. The hard drives are removed by CIO, and left behind with the users. Those hard drives are stored in a safe until they are taken for shredding. We observed hard drives in the safe as part of our audit testing.

2.38 *Documentation of disposals* – CIO updates the centralized inventory system after it performs its disposal procedures for departments. We found that inventory records accurately reflect the device details and locations, but do not indicate whether the devices were securely wiped and related details. We tested 80 computers and found the following.

- Asset description details in the centralized inventory system were accurate for all 80 computers tested (e.g., tag numbers, computer description, serial numbers, current location).

- Inventory records did not indicate whether devices had been securely wiped for 58 of 80 computers tested.

- Of those that were indicated as being wiped, only one provided a date for the procedure.

- The inventory records did not indicate who performed the secure wipe or if anyone confirmed that the procedure occurred.

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2.39 As noted, the Department of Community Services uses its own inventory system, but relies on CIO for disposal services. We tested a sample of 20 of the Department's IT assets on which CIO was to have performed disposal procedures. We noted that 14 of those items did not have the disposal details recorded. Of the six that were recorded, five were noted as surplus, but none indicated if the drives had been wiped.

*Recommendation 2.12*
**The Chief Information Office should develop a process to ensure all the information technology asset disposals it performs are recorded in a centralized tracking system.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation. A centralized spreadsheet has been developed and is being deployed to track the asset disposals.*

*Recommendation 2.13*
**The Chief Information Office should retain specific disposal details for each asset it services such as sanitization (secure wipe) status, date of disposal, the individual who performed the disposal procedures, and current location.**

*Chief Information Office Response:*
*The Chief Information Office agrees with this recommendation. These specific data elements will be captured in the centralized tracking spreadsheet.*

2.40 *Tracking of disposals* – When departments upgrade their IT assets, the assets leaving the department are collected and CIO is then responsible for secure wiping. Departments are not providing CIO with a list of assets expected to be wiped, and CIO does not provide departments with a list of devices wiped. Considering the weaknesses we identified in tracking and secure wipe processes, there is a risk that an asset with sensitive information is unknowingly lost in transit to its final destination, resulting in a greater risk of sensitive information not being wiped. This is another reason that the government's Inventory Control Policy should include reconciliations between physical IT assets and asset listings, as discussed below.

## Inventory Legislation and Policies

Conclusions and summary of observations

The Inventory Control Policy does not reflect the current inventory management structure or risks associated with IT assets. The policy does not provide

sufficient descriptions of the assets to which the policy applies, nor does it assign responsibilities for tracking assets through their lifecycles.

2.41 *Inventory control policy* – According to current policy, Transportation and Infrastructure Renewal is responsible to monitor the use, distribution, and disposal of capital assets, including IT assets, across government. The Inventory Control Policy requires all departments, agencies, boards and commissions to provide annual reports to Transportation and Infrastructure Renewal detailing additions and deletions to capital asset inventories during the year. We reviewed the policy and determined it does not reflect the current structure of inventory management across government. The wording in the policy reflects a centralized inventory management process administered by Transportation and Infrastructure Renewal. However, the inventory function was decentralized to departments a number of years ago.

2.42 In discussing the Inventory Control Policy with Transportation and Infrastructure Renewal officials, a number of weakness were identified that may contribute to many of the concerns we expressed earlier in this chapter regarding IT inventory control.

- The policy does not assign responsibility to departments and agencies to check inventory lists against actual inventory.

- The policy does not assign responsibility to any organization to check that inventory lists are maintained and reconciled.

- The policy does not assign responsibility to ensure that IT assets which are disposed of are appropriately controlled through the disposal process.

2.43 We also noted that the policy does not provide sufficient description of the types of assets to be inventoried and controlled. By default, almost any physical item can meet the current description, resulting in inventory lists which are too large to maintain and reconcile in an economical manner. A policy focused on items of particular risk of loss (e.g., technology, expensive assets, easily portable or concealable items) would be less costly to manage and control and would likely result in better compliance with inventory control requirements.

2.44 Addressing the weaknesses in the current policy would impact all physical assets of government, including IT assets, and therefore would strengthen the controls over those IT assets and the information they contain.

> **Recommendation 2.14**
> **The Department of Transportation and Infrastructure Renewal should work with Treasury Board Office to update the Inventory Control Policy to reflect the current inventory management structure and processes. The policy should contain a definition of which assets to list and control; assignment of responsibilities to control inventories; a requirement to maintain accurate and complete inventory records which are reconciled to physical assets on a regular basis; processes for secure disposal of replaced assets; and responsibilities for enforcement of the requirements of the updated policy.**

*Department of Transportation and Infrastructure Renewal Response:*
*The Department of Transportation and Infrastructure Renewal agrees with the recommendation of the Auditor General. The Department will develop a new Inventory Control Policy in conjunction with Treasury Board, the CIO and other key departments to address the issues raised.*

2.45  The Surplus Crown Property Disposal Act requires departments to provide annual reports to Transportation and Infrastructure Renewal, including particulars on surplus assets disposed of during the year. We found departments are meeting this requirement. However, departments are relying on the CIO to record details of surplus computers at the time of disposal to ensure compliance with the Act. Without adequate inventory tracking of IT assets deployed across government, it is impossible to determine if all applicable assets have been identified and included in the surplus reporting process. Once the recommendations made as part of this audit are implemented, more assurance can be placed on the annual surplus reports.

# 3 Economic and Rural Development and Tourism: Funding Programs

## Summary

The funding programs we examined which process the bulk of the funding at the Department of Economic and Rural Development and Tourism are not well-managed. Processes to evaluate applications and disburse funding require significant improvement; there is limited monitoring of approved projects and a lack of accountability for funds expended.

Similar to our 2011 audit of the Industrial Expansion Fund, our audit of Nova Scotia Jobs Fund transactions identified numerous issues. The Department has not taken sufficient action to address the concerns identified in the 2011 audit. We found deficiencies in all ten Jobs Fund files we tested. Although a process guide was developed, we found the guide is not consistently followed. Improvements in some areas are overshadowed by missing application information, and project assessments which do not always include required economic and financial analysis. For example, financial assistance totaling $323 million to three companies was approved without financial analysis. We also identified deficiencies in information submitted to Cabinet for approval. We recommended the Department update the guide for the recommendations in this chapter and require all staff to use the guide in all transactions. Government should consider whether this program is the appropriate mechanism to deliver loans and subsidies to businesses. In doing so, government may wish to revisit our 2011 recommendation to consider whether the administration of the fund should be transferred to Nova Scotia Business Inc.

We tested seven projects under the Strategic Funding Initiatives program and found none met program eligibility criteria. However, these projects totaling $805,000 were approved for funding. This program has since been transferred to the Department of Communities, Culture and Heritage; we recommended that Department develop and implement appropriate policies which address the issues identified by this audit.

In the remaining eight programs we tested, two programs generally followed guidelines but the Department did not complete sufficiently detailed analysis of applications for the other six programs.

Across all the programs we tested, monitoring of approved projects is limited. In general, there is a lack of accountability back to the Department for funds received. We recommended improvements including site visits and third party verification that projects were carried out as intended.

All funds approved through these programs used public money and, as a general principle, thus require full public scrutiny.

# 3 Economic and Rural Development and Tourism:  Funding Progams

## Background

3.1 The Department of Economic and Rural Development and Tourism is responsible for the development and implementation of policies and strategies that focus on areas such as productivity, innovation and investment as core economic drivers within the province.  The Department provides funding to businesses and organizations through a number of programs including capital investment, student cooperative education, productivity and innovation, and community economic development.  These cover many areas such as business start-ups and expansions, employment initiatives, and productivity enhancement.

3.2 The Department has 28 programs covering many areas; we examined ten economic development programs, including the Jobs Fund.

3.3 During 2012-13, 2,539 applications for funding were received for nine of the programs we tested (excluding the Jobs Fund, discussed later).  1,322 applications were approved with approximately $25.5 million in funding dispersed.

3.4 The application process varies by program but is generally supposed to involve completing an application form and submitting supporting documentation such as financial statements.  For some programs, applications are accepted throughout the year until budget funds have been exhausted; for others, there is a defined period during which applicants must apply.  Program staff are to assess each application against program eligibility requirements and criteria. In some instances, regional office staff screen projects prior to forwarding the application to head office for approval.  Successful applicants receive a letter of offer outlining approved funding and related terms and conditions.

3.5 For the majority of programs we audited, funding is provided in installments or upon project completion once the recipient provides evidence that eligible program costs have been incurred.  For the remaining programs, some or all funding is advanced on approval.  In some instances, projects must be completed by a specific deadline or the recipient is no longer entitled to the funding.

3.6 In May 2011, this Office completed an audit of financial assistance to businesses through Nova Scotia Business Inc. and the Industrial Expansion Fund (administered by the Department of Economic and Rural Development and Tourism).  The audit identified numerous issues with the Industrial Expansion

Fund including few controls over loans and other financial assistance, an overall lack of support for transactions, and inadequate monitoring of loans.

3.7 Subsequent to the audit, the Industrial Expansion Fund was dissolved and replaced with the Nova Scotia Jobs Fund in December 2011. The objectives of the fund include investment for purposes of economic development and the promotion of growth in economic regions or industry sectors. Companies seeking financial assistance submit applications to the Jobs Fund and staff are to evaluate the risks of the transaction along with the potential economic benefits for the province. Proposed transactions are reviewed by an external advisory board prior to submission to Cabinet for final approval.

3.8 Since its inception in December 2011 to September 2013, approximately $611 million in financial assistance (loans, forgivable loans, guarantees and contributions) to businesses has been approved through the Jobs Fund. Of this amount, $183 million had been disbursed as of September 1, 2013.

## Audit Objectives and Scope

3.9 In Spring 2013, we completed a performance audit of funding programs administered by the Department of Economic and Rural Development and Tourism, including the Nova Scotia Jobs Fund. Our audit included the application and assessment process, disbursement and monitoring of financial assistance to successful applicants, and evaluation of programs by the Department.

3.10 We wanted to determine whether the Department of Economic and Rural Development and Tourism has processes to ensure:

- program funding is only provided to approved applicants;

- funding is monitored and used for its intended purpose; and

- program effectiveness is monitored and the results used in program planning.

3.11 The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

3.12 The objectives of the audit were to:

- assess the adequacy of the Department's process for evaluating program funding applications;

- assess the adequacy of the Department's process for disbursing funding to approved applicants; and

- determine if the Department has processes to monitor whether funding programs are achieving their goals and objectives.

3.13  The audit excluded programs administered by the Nova Scotia Tourism Agency or through crown corporations on behalf of the Department.

3.14  Criteria were developed specifically for this engagement.  The objectives and criteria were discussed with, and accepted as appropriate by, senior management of Economic and Rural Development and Tourism.

3.15  Our audit approach included interviews with management and staff at the Department; review of documentation; and testing of applications, funding disbursements and program evaluations for compliance with Department policies.  We conducted our audit in the spring and summer of 2013 using data from April 2010 to December 2012, except for financial assistance through the Jobs Fund which covered the period from December 2011 to March 2013.

3.16  Throughout this chapter, we disclose funding totals which may identify recipients.  We believe that significant government grants and assistance should be public information.  Such funding requires the highest degree of transparency.

## Significant Audit Observations

### Nova Scotia Jobs Fund – Progress Since Last Audit

Conclusions and Summary of Observations

Although there have been some improvements since our 2011 audit of the then Industrial Expansion Fund, many of the same issues still exist.  The Department of Economic and Rural Development and Tourism developed a process guide for the Jobs Fund.  However we found the guide is often not followed.  Application forms were not always completed and assessments did not always include the required financial and economic analysis.  Limited work is done to assess the reasonableness and accuracy of financial projections submitted by applicants.  Management does not review detailed file assessments of proposed financial assistance before that information is summarized and submitted to Cabinet.  For several of the Jobs Fund files we examined, the Cabinet submissions did not completely or accurately reflect information on file at the Department.  Furthermore, we found grants or loan

forgiveness were often based on employment and salary targets which were lower than those used by Department staff to assess financial assistance.   Economic and Rural Development and Tourism needs to take immediate action to implement the recommendations in this chapter and to fully address the recommendations from our May 2011 audit.  Significant changes are needed to move the Jobs Fund to appropriate, transparent processes for providing financial assistance.

3.17   *Background* – The May 2011 Report of the Auditor General included an audit of financial assistance through the then Industrial Expansion Fund. In December 2011, this fund was replaced with the Nova Scotia Jobs Fund. When we undertook an audit of funding programs through Economic and Rural Development in 2013, we decided to examine the Department's progress in addressing deficiencies identified during the 2011 audit.  10 of the 14 recommendations from 2011 which related to the Industrial Expansion Fund are examined in this chapter.  The remaining four recommendations relate to areas such as arrears reporting and follow-up.  All recommendations from the May 2011 audit will be reported in the follow-up chapter of our Spring 2014 Report.

3.18   The following table lists the 10 highest-value financial assistance transactions approved through the Jobs Fund since its inception.

| Nova Scotia Jobs Fund – Ten Highest-value Financial Assistance Approvals | | |
|---|---|---|
| Date | Recipient | Order-in-Council Approval: Financial Assistance |
| March 30, 2012 | Irving Shipbuilding Inc. | $304,000,000 |
| August 20, 2012 | Pacific West Commercial Corporation | $66,500,000 |
| December 7, 2012 | Bowater Mersey Paper Company | $32,000,000 |
| June 21, 2012 | Cooke Aquaculture | $25,000,000 |
| April 4, 2013 | Northern Pulp Nova Scotia Corporation | $22,582,000 |
| July 16, 2012 | Chorus Aviation Inc. | $16,500,000 |
| March 19, 2012 | NewPage Port Hawkesbury Corp./ Forestry Infrastructure Fund | $12,000,000 |
| February 6, 2013 | Blackberry | $10,000,000 |
| January 17, 2013 | Michelin | $8,880,000 |
| April 25, 2013 | EPC Industries Limited | $7,100,000 |
| | Total | $504,562,000 |

3.19   *Jobs Fund processes* – The May 2011 Industrial Expansion Fund audit included a recommendation that the Department document and implement processes for assessment and approval of loans and development incentives. In response to this recommendation the Nova Scotia Jobs Fund Process Guide was developed.  The guide outlines approval, disbursement and financial monitoring processes as well as information which must be considered when

assessing applications. While the development of a guide begins to address our recommendation, our testing of Jobs Fund files indicated the process guide is not followed in many instances.

3.20 The Process Guide requires an application form to be completed for each transaction or, if one is not completed, the investment manager is to attach an explanatory note. For five of 10 files tested, an application form was not completed; only three of these files included an explanatory note. In the remaining two instances, the Province's involvement with the companies began before the Process Guide was established. However, it is still important to ensure sufficient information is collected from private companies to protect the Province's interests. While much of the application information was covered by other documentation submitted by the clients, information on pending or outstanding litigation and sign off by company management that information the company provided is accurate were not included. For one additional file, an application form was submitted but the disclosure of pending or outstanding litigation section was not completed. Although the Process Guide allows a transaction to proceed without an application, this is a poor business practice. Information related to potential lawsuits and management sign-off that the company has provided accurate information to the Province are relevant when evaluating a potential investment.

*Recommendation 3.1*
*The Department of Economic and Rural Development and Tourism should require all Jobs Fund applicants to submit formal applications.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will ensure application forms are submitted by applicants for all Jobs Fund transactions, and revise the Jobs Fund Process Guide and application form.*

*In response to the Auditor-General's May 2011 recommendations, the government of the day announced the establishment of a new fund with modern governance. Legislation creating the fund came into effect December 2011, and new processes were introduced April 1, 2012. ERDT intends to annually review and continuously improve our processes.*

3.21 *Financial analysis* – The Jobs Fund Process Guide indicates that every assessment should include a financial analysis of the applicant which considers the company's historical performance and its current cash situation. We also believe it is important to assess the reasonableness of projections.

3.22 In three of 10 Jobs Fund files tested, the Department did not obtain financial statements from the client; essentially no financial analysis was completed. These transactions totaled approximately $323 million and included grants,

loans and forgiveable loans ranging between $8.8 and $260 million.  Approving financial assistance of this magnitude with no financial assessment of the recipients is very risky for the Province.  In the absence of a detailed financial analysis, Department staff do not have adequate information to assess the companies' ability to repay loans and provide expected economic benefits.

3.23 For one of these companies, the approved financing package included a repayable loan.  Without a financial analysis, the Department does not know whether the company is capable of taking on the proposed debt and whether it is likely to be able to meet its repayment obligations.  For the remaining two cases, the financial assistance was a grant and therefore not repayable.  The Department does not consider a financial analysis necessary when assistance is not repayable.  However, funding is provided to companies based on the expectation they will produce economic benefits to the Province over the long term.  A financial analysis would help ensure the company is likely to operate in the province long enough to produce these benefits.  Furthermore, if a company ceases to exist during the transaction period there is an opportunity cost of having provided this money when other applicants may have been rejected.

3.24 *Financial information* – Our previous audit of the Industrial Expansion Fund recommended that the Department develop a process to ensure the assessment of loans and development incentives is sufficiently supported.  We recommended that this include guidance regarding the appropriate level of assurance for financial information submitted by the applicant.   The Jobs Fund Process Guide indicates supporting financial documentation may include accountant-prepared financial statements, when available, or company-prepared statements or projections. There is no requirement for audited financial statements.   Additionally, company-prepared projections do not have to be verified for accuracy or reasonableness.

3.25 We tested 10 Jobs Fund files.  Although the Jobs Fund Process Guide does not require audited financial statements, we expected seven files would have audited statements because the companies involved are large and significant financial assistance was provided by the Province.  Some of the companies involved are publicly traded and accordingly, would have audited statements.  However, no financial statements were provided for three files; another file included draft, unaudited statements.  The remaining three files had audited financial statements. Audited financial statements help ensure financial analysis is based on accurate information.

3.26 We also found that three of the ten files included projections estimating future financial results.  These projections are key to the success of the Jobs Fund transaction, however for two of the transactions, we found there was no evidence an assessment was completed to determine whether the projections

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were reasonable.  The value of financial assistance provided ranged from $7.1 and $22.5 million.

3.27    Without audited financial statements and Department assessments of company-provided financial projections, funding decisions could be based on inaccurate information. This could have a significant impact on the company's ability to repay loans and deliver the expected economic benefits resulting from Provincial funding.

**Recommendation 3.2**
**The Department of Economic and Rural Development and Tourism should require all Jobs Fund applicants that have audited financial statements to include these with their applications.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately implemented.  Where applicants have audited financial statements, they will be assessed.  Where companies do not have audited financial statements, ERDT will document the reasons in the file (e.g. start-up, branch of large multinational company, etc.).*

*Not all companies have audited financial statements to review.  Companies that are subsidiaries of multinational companies may not have audited financial statements related to Nova Scotia operations, even though the multinational company is publically traded.  Also companies that are newly incorporated may not have audited financial statements.*

**Recommendation 3.3**
**The Department of Economic and Rural Development and Tourism should complete a financial analysis of all applicants to the Jobs Fund. The analysis should be in compliance with the Jobs Fund Process Guide and documented in the file.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately implemented.  Financial analysis will be undertaken in compliance with the Process Guide.*

**Recommendation 3.4**
**The Department of Economic and Rural Development and Tourism should document and assess the reasonableness of Jobs Fund applicant financial projections.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately*

*implemented.   ERDT will ensure, where financial projections are applicable; assessments are made of the reasonableness of assumptions in financial projections.  The success of the transaction may not be measured in financial terms. Social-economic or regional impacts may be the goal of the transaction resulting in neutral financial impact to the province.*

3.28  *Economic analysis* – The Jobs Fund Process Guide requires that each assessment include an analysis of the transaction's estimated economic impact on the Province.  For one of 10 Jobs Fund files tested, this analysis was not completed.  Without an economic analysis, there is no way to know whether the transaction will provide sufficient economic impact to justify the financial assistance provided.  Furthermore, it also means Jobs Fund applicants are not evaluated consistently.

***Recommendation 3.5***
***The Department of Economic and Rural Development and Tourism should complete an economic analysis for all Jobs Fund applicants.***

***Department of Economic and Rural Development and Tourism Response:***
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will ensure economic analysis (i.e. an estimate of anticipated provincial employment tax) is conducted where employment is the economic objective.*

*For certain transactions, the format and documentation of economic analysis may vary from the standard form due to the nature of the transaction.  This will often involve enhanced due diligence, third party reports, and more rigorous analysis.  The Process Guide will be updated and a note should be placed in the file explaining when the standard form is not being used, because of additional due diligence.*

3.29  *Assessment checklist* – Our May 2011 Report recommended a standard checklist be developed to ensure consistent information is collected for potential loans and development incentives.   The Department has not adequately implemented this recommendation.  There is no checklist to help ensure all required information is collected and analysis is completed.  The Department has implemented a due diligence questionnaire which addresses some aspects a checklist should cover.  However it does not address whether staff analyzed the information.

3.30  *Management review* – The Jobs Fund Process Guide requires management review and sign-off for all files.  We found management had not reviewed the Jobs Fund files we tested.  Appropriate review could help identify which files have missing information which should be considered.  Once the investment manager assesses the application, the proposed transaction is summarized

and submitted to the Nova Scotia Jobs Fund Board.  Following the Board's review, proposals are submitted to Cabinet for approval.  When management does not review the files supporting Cabinet submissions, it means the Jobs Fund Board and Cabinet may not have all the information regarding the transaction and potential risks.  This could influence decisions.

3.31     As discussed earlier, we identified instances in which required documentation was not obtained and information was not analyzed in accordance with the Process Guide.  Management review of completed files and an overall checklist would help promote consistency and compliance with the requirements of the Jobs Fund Process Guide.

*Recommendation 3.6*
*The Department of Economic and Rural Development and Tourism should immediately develop, implement and consistently use a standard checklist to ensure the compliance with the Jobs Fund Process Guide.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented.  ERDT has implemented a standard checklist to ensure compliance with the Jobs Fund Process Guide.  The Process Guide will be updated to include the checklist, in addition to the current due diligence checklist and the checklist currently done in the excel spreadsheet as per the current Process Guide.*

*Recommendation 3.7*
*The Department of Economic and Rural Development and Tourism should implement management review of all transactions once the investment manager has completed the assessment.  Evidence of management review should be documented in the file.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented.  ERDT has included a management sign-off template to indicate that the file has been reviewed before it is submitted to the Jobs Fund board and Cabinet.*

3.32     *Nova Scotia Jobs Fund Board* – The Nova Scotia Jobs Fund Board was established as an independent advisory council to provide input to the Minister and Executive Council.  While all ten Jobs Fund transactions we tested were reviewed by the Board, the Minister can decide not to send a proposal to the Board for consideration.  Board review should be a key component in assessing applications.

*Recommendation 3.8*
*The Department of Economic and Rural Development and Tourism should establish a requirement that all proposals be presented to the Nova Scotia Jobs Fund Board prior to being submitted to Cabinet.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation as this is current practice and already implemented. ERDT will revise the Process Guide accordingly.*

*The Department will ensure that this continues and the Jobs Fund Advisory Board continues to provide advice to the Minister for all transactions.*

3.33 *Completeness of Cabinet submissions* – All proposed funding through the Jobs Fund requires Cabinet approval. We tested 10 Jobs Fund files and found information provided to Cabinet in certain instances was deficient; it did not always include all relevant information and related risks from the Department's assessment of the application. Examples of the deficiencies we identified in submissions for the files we tested include the following.

- For one proposal, the funding was only sufficient for the company to break even. In addition, the company is expected to experience product price declines in the long term.

- On another proposal, the company's security was not sufficient to cover the financial assistance.

- The Jobs Fund Board expressed concerns with two proposals.

3.34 These deficiencies involved proposals totaling over $400 million.

3.35 Cabinet is ultimately responsible for approving all financial assistance through the Jobs Fund. Government staff are responsible for ensuring that Cabinet has accurate and complete information on which to base its decisions. The Department of Economic and Rural Development and Tourism has not adequately fulfilled its responsibilities in this regard; information has been missing from Cabinet submissions.

*Recommendation 3.9*
*The Department of Economic and Rural Development and Tourism should implement a process to ensure information submitted to Cabinet is complete and accurate.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation, and it has been immediately implemented. ERDT follows the Treasury Board Management Manuals when submitting written documentation to Cabinet.*

*Section 3.7 of the Manuals, says that substantive information to clearly describe the issue/action to and allow Cabinet to make an informed decision, and should be provided concisely. Given these requirements balancing completeness and conciseness is a difficult task and requires judgment. Where revisions to material circumstances in the file have happened, Cabinet is typically appraised by verbal presentations.*

3.36    *High risk loan* – Cabinet approved $25 million in financial assistance through the Jobs Fund, $9 million of which will be forgiveable if certain conditions are met. We identified a number of issues with the terms and conditions of this loan, including some which increase the Province's risk.

- There is no security for the loan.

- The net economic benefit to the Province is negligible.

- The funds are not limited to use in Nova Scotia and this company operates in other jurisdictions.

- Most of the assistance will be provided before projects are complete and related jobs are created.

- Loan forgiveness is possible before the project is complete and all economic benefits realized.

- 50 percent of the loan is not repayable until 2022; only minimum payments are required for the initial six years of a 10-year agreement.

- Despite the applicant's known legal issues, the signed agreement says the Province cannot terminate the arrangement if the company is found guilty.

3.37    We recognize that government financial assistance approved by Cabinet may be intended to serve other purposes besides economic benefits. However, providing funding for projects with low economic benefits to high risk companies, particularly when the terms of the assistance are unfavourable to the province, may not be an effective use of scarce government resources. Such projects can limit funding available to alternative investments which may be able to generate greater economic impacts for the province.

3.38    *Disbursement of financial assistance* – Where applicable, we tested disbursements of financial assistance for the 10 Jobs Fund files selected for audit. We found problems with all six files in which funds had been released to the company.

3.39    The standard terms and conditions for financial assistance provided through the Jobs Fund state the funds will be disbursed by the province based on original invoices and cancelled cheques, or other documentation evidencing

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program expenditures. However, our testing showed that funding was often paid with no evidence that expenses were incurred and paid by the company. Examples of poor support include estimated project expenses with no proof of payment. In other instances, recipients were advanced funding upon approval. In most cases, staff told us that the documentation provided was considered appropriate evidence of expenditures and acceptable under the terms and conditions of the assistance. When financial assistance is disbursed without adequate proof of expenses and payment, there is no accountability for how funding is used and an increased risk that the funding will not be used for its intended purposes.

*Recommendation 3.10*
**The Department of Economic and Rural Development and Tourism should only disburse financial assistance based on expenses incurred and paid. Disbursements should be supported by original receipted invoices and cancelled cheques or equivalent documentation to prove the company has paid the related expenses.**

*Department of Economic and Rural Development and Tourism Response:*
*The Department understands this recommendation; however ERDT needs to make a distinction between capital and working capital. The department agrees with and is able to implement this recommendation with respect to capital items.*

*However, this recommendation is not workable for financial assistance provided through accountable advances or for working capital purposes, and therefore would not have receipted invoices or cancelled cheques. Accepting this recommendation for working capital would effectively take a policy decision that working capital assistance (e.g. for inventories, accounts receivable, prepaid expenses) is no longer provided. The department would require direction for this policy change.*

*Nonetheless, staff will enhance the documentation and verification processes and procedures for disbursements of funds. Such enhancements will be documented in the Jobs Fund Process Guide.*

3.40 *Standard terms and conditions for financial assistance* – The Department has standard terms and conditions which are to be used when providing financial assistance to companies. However we found that an older version of the standard terms and conditions (2005 version versus 2009) was used for a transaction valued at $304 million. At some point before the agreement was signed, Department staff were aware that the most current terms and conditions were not used, however no changes were made. The agreement was signed with the older terms and conditions. We identified several areas in which the older terms and conditions were weaker and exposed the Province to greater risks.

- Proof expenses were paid is not required before disbursing assistance.

- The Province cannot request third party certification of expenditures as it can under the revised standard terms and conditions. The Department told us the company agreed to provide support for claims. However, this does not include copies of invoices. Without details of expenditures, there is no evidence that the goods or services obtained relate to the Province's financial assistance.

- The Province does not have the right to terminate the agreement if the company is in default under other financial assistance agreements with the province or any of its agencies

3.41   The Department should have used the most recent version of terms and conditions which better addresses potential risks to the Province.

> **Recommendation 3.11**
> **The Department of Economic and Rural Development and Tourism should use the most current version of standard terms and conditions when signing agreements for financial assistance.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will ensure the most recent Jobs Fund Process Guide, Application Form and Standard Terms and Conditions are used for all transactions.*

3.42   *Payment conditions* – Our May 2011 audit of the Industrial Expansion Fund included a recommendation that the Department implement a checklist to ensure companies submit required information based on their letters of offer. While companies receiving assistance from the Jobs Fund sign a letter of offer which includes conditions that must be met prior to funds disbursement, we found the Department has failed to implement our recommendation. No checklist has been developed to track required information.

3.43   For two of six Jobs Fund files tested, the conditions outlined in the letter of offer were not satisfied prior to disbursement of funds. Examples include missing project cost estimates, lack of confirmation of other sources of funding, and no confirmation of company financial contributions to the project. Funding conditions are intended to reduce the risk to the province by providing some assurance that recipients have developed project plans and that sufficient financing is in place. Failure to ensure funding recipients meet conditions increases the risk that loans will not be repaid or the expected economic benefits of the projects may not be realized. A checklist would help ensure adequate information was collected as required by signed agreements between the Province and companies.

**Recommendation 3.12**
**The Department of Economic and Rural Development and Tourism should immediately develop, implement and consistently use a checklist to ensure required information has been submitted. Funding should not be disbursed until all information has been received and all conditions have been met.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will ensure disbursements are made in accordance with letters of offer and agreements, and all conditions precedent have been met or there is Ministerial and Deputy Minister or Associate Deputy Minister approval for any waivers or amendments.*

3.44 *Solicitor or investment manager review* – The Jobs Fund Process Guide requires that a lawyer or Department staff are satisfied that conditions in the letter of offer have been met and any required security is in place. We tested six files for which funding was disbursed. We found no evidence that four of six files were reviewed to ensure conditions were met before funds were released and in one of these files, the conditions had not been met when the funds were disbursed. In another file, the conditions were not met although an investment manager did review this file before disbursing funds. A documented and thorough review of the file by the lawyer or Department staff would verify all conditions are met and ensure the Department's policies are followed when disbursing Jobs Fund financial assistance.

**Recommendation 3.13**
**The Department of Economic and Rural Development and Tourism should develop a disbursement memo or similar document and require the solicitor or investment manager to complete this memo confirming all conditions have been met prior to releasing funding.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will ensure a disbursement memo is completed for each disbursement and signed by the Investment Manager and Fund Manager/ Director/Executive Director, as well as the Minister and DM or ADM if there are any exceptions to the conditions precedent.*

3.45 *Inconsistencies* – Jobs Fund financial assistance may include contributions and forgivable loans based on the project's estimated economic benefits. The signed agreement documents the requirements companies must meet to earn contributions or loan forgiveness; these are generally based on job creation or retention, and expected salaries. We identified four of 10 files for which the terms of the signed agreement were not consistent with the employment and salary factors used in the economic analysis.

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- For financial assistance totaling $8.9 million the funding agreement had no employment or salary targets but the application was assessed based on creating 52 new jobs and maintaining the company's current workforce at a specific salary.

- For financial assistance totaling $16.5 million, the project was assessed based on creating 150 new jobs at a specified salary. However, the signed agreement only requires that the company meet a much lower salary requirement.

- For financial assistance totaling $22.6 million, the economic analysis was based on 230 existing and 20 new jobs at a specific salary. The signed agreement only requires the company to employ more than 200 employees at a lower salary.

- For financial assistance totaling $25 million, the project assessment indicated it would create 455 new jobs at a specific salary. The actual terms and conditions of the financial assistance only required the company to create 400 new jobs with no salary targets.

3.46   A project's expected economic impact is decreased when fewer jobs are created or retained and lower salaries are provided. Furthermore, the company has no incentive to meet the higher employment levels originally presented to the Department.

*Recommendation 3.14*
*The Department of Economic and Rural Development and Tourism should ensure criteria for the receipt of financial assistance and loan forgiveness are consistent with the information used to assess and approve the initial request.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will work to ensure that the terms and conditions of the financial assistance are consistent with approved documentation. Where there are differences in economic impact and the terms and conditions in agreements, this will be made clear to Executive Council.*

3.47   *Verification of forgiveness targets* – We identified issues with how conditions for loan forgiveness would be verified for three transactions totaling $75.5 million.

- In one instance, external verification of loan forgiveness criteria is not required.

- The signed agreement allows documentation satisfactory to the Minister to support the criteria for loan forgiveness have been met. This means the support may not be verified by an independent third party.

- For the remaining transaction, the company received two loans, both of which are forgiveable under certain conditions. One letter of offer did not included guidance on verifying that loan forgiveness criteria were met. Without clearly defined terms, documentation submitted may not provide adequate assurance. For the second loan, forgiveness is based on written confirmation or evidence acceptable to the Minister which also does not provide adequate assurance requirements have been met.

3.48 Loan forgiveness should only be provided if the company achieves the criteria outlined in its letter of offer. If loans are forgiven when criteria have not been achieved, economic benefits may not be realized and the Province may not be repaid funds which it should receive.

**Recommendation 3.15**
**The Department of Economic and Rural Development and Tourism should require an independent third party to confirm that criteria have been met prior to forgiving a loan.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation, and will revise the Process Guide accordingly.*

3.49 *Jobs Fund site visits and annual reviews* – Our May 2011 audit recommended *"The Department of Economic and Rural Development and Tourism should determine the standard information which should be examined during Industrial Expansion Fund annual account reviews and develop a process to ensure this information is obtained and documented."* The Jobs Fund Process Guide includes an annual account review form to be completed by the investment manager but there is no guidance on when these forms should be completed and management does not track completion. The Process Guide does state investment managers typically visit a client once per year to tour facilities and discuss financial results and plans for the future.

**Recommendation 3.16**
**The Department of Economic and Rural Development and Tourism should immediately develop and implement a process to track and document the annual monitoring of Jobs Fund clients.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation, and a process to track and document the annual monitoring of clients and site visits has been developed and will be enhanced.*

*ERDT will seek to continuously improve annual monitoring.*

3.50  *Noncompliance with terms and conditions* – We identified two instances in which companies did not comply with their financial assistance terms and conditions but there were no consequences from the Department.  In one case, the letter of offer stated the company shall draw down the first disbursement of funds no later than 90 days following approval of the financial assistance. Failure to comply with this would result in the termination of the agreement. Despite funds not being disbursed to the company by this deadline, the agreement was not terminated.

3.51  In another file, the company was to provide audited financial statements within 120 days of its fiscal year end.  These statements were not received until 48 days beyond the deadline.  Financial statements are necessary to assess the current financial condition of the company.  Failure to obtain this information in a timely manner can slow the identification of issues that may impact a company's ability to repay loans or complete the funded projects.  In this case, the letter of offer did not include consequences for failure to meet this requirement which eliminates any incentive for a company to comply.

*Recommendation 3.17*
**The Department of Economic and Rural Development and Tourism should include consequences for failure to comply with terms and conditions in all letters of offer.  In the event of noncompliance, the Department should take appropriate action.**

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation. The Jobs Fund will implement a process where, in the event of non-compliance, consideration of different courses of action is undertaken and the decisions and reasons for taking action (or not taking action) are documented in the transaction file.*

3.52  The Jobs Fund Process Guide lays out processes to assess applicants, approve assistance, and monitor until and after funds are disbursed.  While it could represent a significant step forward for the Jobs Fund, Department staff often do not follow the guide.

*Recommendation 3.18*
**The Department of Economic and Rural Development and Tourism should update the Nova Scotia Jobs Fund Process Guide to address the recommendations in this chapter.  The Department should require all staff to follow the Process Guide for all transactions.**

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation, and ERDT will develop an action plan to improve internal policies, procedures, controls and governance of the Jobs Fund and will ensure the Jobs Fund Process Guide is followed and*

*where it permits exceptions, document the reasons for such exceptions, as per the responses provided to recommendations in this chapter.*

3.53 *Significant change needed* – The findings in this chapter are similar to the serious deficiencies identified during our 2011 audit of the Industrial Expansion Fund. At that time, we recommended that the Department either implement appropriate governance, controls and policies, or transfer the administration of the Fund to Nova Scotia Business Inc. The Department chose to retain the Fund but has not taken sufficient action to address the issues identified by that audit. Immediate and significant changes are needed to ensure transparency and accountability for taxpayer dollars. Government should consider whether this program is the appropriate mechanism to deliver loans and subsidies to businesses. In doing so, government may wish to revisit our 2011 recommendation which suggested transferring the program to Nova Scotia Business Inc. as an option.

## Strategic Funding Initiatives

### Conclusions and summary of observations

None of the Strategic Funding Initiatives projects we tested met program eligibility criteria. There is no process to guide staff when assessing applications to the program and no support for the assessment conclusions. Funding is advanced once applications are approved; there are no terms or conditions which recipients must meet. There is no monitoring to determine if funds were used as intended. The Department did not know whether funded projects were completed for most of the transactions we tested. As of April 1, 2013, the Strategic Funding Initiatives program moved to the Department of Communities, Culture and Heritage. Accordingly, that Department will be responsible for implementing the recommendation in this section.

3.54 *Background* – The Strategic Funding Initiatives program is a pool of discretionary funding controlled by the Minister and used to support economic development projects which do not fit the criteria of other Departmental funding programs but have an overall net benefit to the community. Applicants self-identify potential projects to the Department and, if approved, receive a one-time contribution towards the cost of the project.

3.55 As of April 1, 2013, the Strategic Funding Initiatives program moved to the Department of Communities, Culture and Heritage. Accordingly, our recommendation is addressed to this Department as they now have responsibility for this area.

3.56 *Project proposal* – Applicants are required to submit a project proposal which provides an overview of the project, cost estimates, and financing sources.

For three of seven files tested, a project proposal was not provided but funding was still approved. Without the information which would typically be included in a proposal, an appropriate evaluation of the project cannot be completed. Additionally, failure to collect standard information means all applicants may not be assessed consistently.

3.57 *Assessment of proposals* – There is no process documentation to guide staff in assessing applications against established program criteria. We found the Department often lacked documentation supporting how an applicant met program eligibility requirements and criteria. For example, projects funded under this initiative must be economically sustainable, but staff told us there is no consistent definition of sustainability to be used when assessing proposals. Furthermore, we found little documentation in the files to support an assessment of this criterion.

3.58 *Eligibility criteria* – Projects were approved for funding despite not meeting program eligibility criteria. We identified issues in all seven projects we tested which were approved through the Strategic Funding Initiatives. The total funding disbursed for these projects was $805,000. To receive funding under this initiative certain criteria must be met, including that a project must be economically sustainable, not fall under the responsibility of another provincial government department, and not relate to maintenance activities. We found approved projects did not meet program eligibility criteria for all seven files we tested.

- For six of seven files, the project funded was not economically sustainable.

- For five of seven files, the project fell under the responsibility of another provincial government department.

- For three of seven files, the funding related to maintenance projects.

3.59 There was no evidence of Department staff sign off on three of these projects. Final approval rests with the Minister; all seven projects we tested received Ministerial approval.

3.60 Approving projects which do not meet program criteria reduces the transparency and fairness of the process to assess applications. It may also result in the investment of government resources in projects with minimal economic impact. Furthermore, it takes scarce resources away from projects which may meet program criteria.

3.61 *Multiple contributions* – Funding through the Strategic Funding Initiatives is only to be provided on a one-time basis to the successful applicant. However, we identified one recipient with six disbursements from this program during our audit period totaling approximately $239,500.

3.62 *Advances* – Funding through the Strategic Funding Initiatives program is advanced to recipients upon approval. There are no terms or conditions attached to this funding. Once the funding is disbursed, the recipient is not accountable to the Department for how the money is used, and the Department does not monitor projects to ensure completion. During the audit period, approximately $3.6 million in funding was provided through this program. For five of seven files tested, the Department did not know whether the approved projects were completed. Payment of funding up front with no mechanism requiring the recipient to pay the money back if projects are not completed is a poor business practice. Recipients could spend the funding on an unrelated project; the Department would have no recourse and may not even be aware funds were spent elsewhere.

> **Recommendation 3.19**
>
> **Before continuing with the Strategic Funding Initiatives program, the Department of Communities, Culture and Heritage should develop and implement appropriate program policies. In doing so, the Department should consider the issues identified during our audit and develop policies which address these concerns.**

**Department of Communities, Culture and Heritage Response:**

*The Department of Communities, Culture and Heritage agrees with this recommendation. The department has already made some adjustments to the program criteria and will ensure that the development and implementation of complete processes and polices identified in this audit will be completed over the next fiscal year.*

## Assessment and Evaluation – Other Funding Programs

### Conclusions and summary of observations

In the remaining eight programs we tested, information to be submitted by the applicant was mostly on file. Two programs generally followed guidelines. However, we found a lack of guidance to assess applications in the other six programs and we found the Department did not complete sufficiently detailed analysis of applications. This increases the risk of inconsistent decisions.

3.63 *Background* – In addition to the Jobs Fund and the Strategic Funding Initiatives, we examined eight funding programs administered through Economic and Rural Development and Tourism.

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| Program | Description |
|---|---|
| Productivity and Innovation Voucher Program | This program provides a credit note which small and medium-sized enterprises can use to acquire assistance from Nova Scotia universities and colleges to help make their businesses more innovative and productive. The maximum credit note is $15,000. |
| Capital Investment Incentive | This incentive contributes 20% of the cost of technologically-advanced machinery, clean technology, equipment, software and hardware with preference given to exporters in qualified industries. The maximum reimbursement is $1 million. |
| Workplace Innovation and Productivity Skills Incentive | The incentive encourages businesses to invest in training for skills development, productivity improvement and adaption to new technology and innovative processes. Maximum contributions are based on the type and size of business. |
| Strategic Co-operative Education Incentive | The incentive provides private sector, government-funded and non-profit organizations 50 per cent of the required minimum hourly wage for co-operative education opportunities. |
| Student Career Skills Development Program | This program partners with not-for-profit organizations to create career-related summer jobs for post-secondary students. Organizations are reimbursed $8.50 per hour for up to 35 hours worked per week. |
| Community Economic Development Fund | This program provides financial assistance for regional economic development activities within six different funding categories.  The applicant must contribute at least 20% of the project costs. |
| Team West Community Development Fund | This program is the same as the Community Economic Development Fund but is designated specifically for opportunities in the Western region of the Province. |
| Nova Scotia Business Development | This program provides assistance for eligible business activity that increases productivity, explores product innovation, delivers strategic planning, implements operational efficiencies to improve competitiveness, and expands the international commerce participation of a business.  Funding may be provided up to 50% of total costs, to a maximum of $10,000. |

3.64   *Supporting documentation* – We found applications were completed for the transactions we tested in all eight programs.  Applicants are also required to provide supporting documentation to confirm eligibility; this information is also to be used when assessing the application.

3.65   Most files we tested had the required documentation from the applicant. However, we identified five of 63 files in which the applicant did not provide required documentation but funding was still approved.

- Two of six Community Economic Development Fund applications and one of two Team West funding applications did not include documentation confirming additional funding sources. This information ensures sufficient funds exist to complete the proposed project.

- One of 10 Workplace Innovation and Productivity Skills Incentive files tested had no applicant financial statements.

- The Nova Scotia Business Development Program file tested did not include a resume for the consultant to be engaged for the project.

3.66   Supporting documentation assists staff in assessing applications. Without it, applicants may not be consistently evaluated and funding may be granted to applicants who do not meet eligibility requirements at the expense of more qualified applicants.

*Recommendation 3.20*
*The Department and Economic and Rural Development and Tourism should comply with program guidelines to collect and assess consistent information for each applicant before providing financial assistance.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has already been implemented. ERDT will create a checklist to ensure all relevant information for each applicant is consistent.*

3.67   *Evaluation of applications* – Two programs generally followed guidelines and application assessments were adequate. However, for six of eight programs tested, there was insufficient process documentation to guide staff in assessing applications against the established criteria. We found the Department lacked support to demonstrate how an applicant met program eligibility requirements and criteria.

3.68   For example, when assessing applications to the Capital Investment Incentive program, staff complete an analysis of the project's costs and benefits to the Province. However, for eight of 27 files (30%) tested, the only justification provided under this criterion was that the proposed project fell within government's JobsHere initiative. This does not consider the costs and benefits of the project.

3.69   The Community Economic Development Fund states projects must be sustainable but staff told us there is no consistent definition of sustainability

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to be used when assessing applications. Furthermore, we found little documentation to support the assessment of this criterion in the files we tested.

3.70 Similarly, for the Productivity and Innovation Voucher program, there is limited guidance for staff detailing how to assess potential projects. A panel of three program staff score projects based on five criteria and award funding to the highest scoring applicants. However we found little information in the files we tested which supported the project ratings. While there will always be an element of subjectivity involved with an assessment of this nature, comprehensive process documentation would guide staff in scoring projects and help promote consistency across staff and from project to project. It would also help define adequate supporting information which should be considered and maintained on file at the Department. Failure to document the rationale for decisions limits transparency and consistent assessment of all applications.

*Recommendation 3.21*
***The Department of Economic and Rural Development and Tourism should develop and document evaluation processes for funding applications. These should clearly outline evaluation criteria as well as provide guidance on how criteria should be assessed.***

***Department of Economic and Rural Development and Tourism Response:***
*The Department agrees with the recommendation, and will develop and document evaluation processes for applications, in order to ensure all transactions are in accordance with the program guidelines and that relevant documentation is included in the file.*

*Recommendation 3.22*
***The Department of Economic and Rural Development and Tourism should document its evaluation of funding program applications. Documentation should include rationale to support the assessment of program criteria for approved and rejected applications.***

***Department of Economic and Rural Development and Tourism Response:***
*The Department agrees with the recommendation, and will develop and document evaluation processes for applications and work to ensure all transactions are in accordance with the program guidelines and that relevant documentation is included in the file in rationale for approving or rejecting applications.*

3.71 *Rejected applications* – For three programs we tested, there was generally no documentation to support why applications were not approved for funding. (This includes the strategic funding initiatives program discussed earlier in the chapter; this program was transferred to Communities, Culture and

Heritage on April 1, 2013.)  Furthermore, for two of these programs rejected applications are not retained at head office.  Some documentation may be maintained at regional offices but this would be dependent on the field officers individual file practices.  Applicant evaluations and rationale for approving or rejecting proposals should be documented.  This allows management to verify approvals and rejections are appropriate.

3.72  All government departments are required to have document retention policies.  Economic and Rural Development and Tourism's policy states that all economic grant program case files should be kept for a minimum of seven years.  Department staff are not complying with this policy.

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*Recommendation 3.23*
***The Department of Economic and Rural Development and Tourism should follow its document retention policy for rejected applications.***

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*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has already been implemented.  Staff is being trained and education provided related to records management and retention policies.*

*As the findings relate to two out of ten programs reviewed, specific STOR training will also be targeted to these program areas to support continuous improvement.*

## Disbursement and Monitoring – Other Funding Programs

Conclusions and summary of observations

The Department's processes to disburse financial assistance and subsequent monitoring are inadequate.  Required documentation and proof of payment are not always provided before funding is disbursed.  Furthermore, guidelines are not consistently applied for the Capital Investment Incentive Program.  There is limited monitoring conducted by the Department to ensure funding is used for its intended purposes.  For one program, the majority of funding may be advanced to the recipient before the approved services have actually been provided.

3.73  *Disbursement* – We tested financial assistance payments for the eight program areas we audited.  We identified a number of areas of concern including:

- program guidelines were not always followed when disbursing funds;

- proof of payment and other supporting documentation provided by the recipient was not always adequate; and

- funding was advanced with no accountability back to the Department for how the money was spent.

3.74 *Inconsistent application of program guidelines* – Our testing of the Capital Investment Incentive program identified several instances in which disbursements were not in compliance with program guidelines.

- For 8 of 27 files for which funds were disbursed, the project was not completed within six months of approval as required to receive funding under this program.

- For five of 27 files, we could not determine whether the project was completed within six months because the claim submission was not dated.

- For three of 27 files, funding was provided over two claims which is not in accordance with program guidelines.

- For three of 27 files, funding disbursed was greater than the approved amount.

3.75 Deviation from program guidelines can result in inconsistent treatment of participants.

*Recommendation 3.24*
**The Department of Economic and Rural Development and Tourism should comply with Capital Investment Incentive program guidelines.**

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented. The Department will work to ensure all transactions are in accordance with the program guidelines and that relevant documentation is included in the file through the use of a checklist.*

3.76 *Proof of payment* – All programs tested include a requirement that the recipient must provide proof of payment in order to receive the full amount of approved funding. This should include original invoices and cancelled cheques or equivalent documentation to verify the goods or services purchased and the amount paid. We identified several instances across multiple programs in which proof of payment was not provided but funding was still disbursed. For seven of nine files tested in the Community Economic Development Fund, Team West and the Nova Scotia Business Development Fund, proof of payment documentation submitted did not provide adequate support to confirm the recipient incurred the expenses. In some cases, recipients provided cheque numbers and records from their accounting systems. Program staff told us this documentation is acceptable under the Department's current guidelines.

However, this does not provide evidence of payment for goods or services. Inadequate proof of payment means that funding may not have been used for its intended purposes.

3.77 We also identified two instances in the Capital Incentive Investment program and Workplace Innovation and Productivity Skills Incentive program in which payment was disbursed to recipients without proof of payment.

3.78 *Supporting documentation* – Under the Capital Investment Incentive program, companies are eligible to receive funding for 20%, up to $1 million, of the total cost of the project. One of the 27 files we tested did not have support for the full cost of the project. Invoices and proof of payment were submitted to support 60 percent of the total project costs. Without full support, the Department cannot be certain of the total project cost and thus the 20% provincial contribution.

*Recommendation 3.25*
**The Department of Economic and Rural Development and Tourism should follow its process guidelines and ensure companies submit support for full project costs.**

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented. The department will revise the guidelines accordingly.*

*Guidelines will require all transactions are in accordance with the process guidelines and that relevant documentation is included in the file to support full project costs.*

3.79 *Advances* – The Workplace Innovation and Productivity Skills Incentive program provides funding to companies to conduct staff training. Once projects are approved, a portion of the approved assistance is advanced. For projects under $25,000, 90 percent of the training cost is advanced up front; for projects over $25,000, 50 percent of approved funding is advanced. At the end of the project, the company is required to provide evidence of total training costs. Advances are based solely on notification from the company that training has begun; no supporting documentation is required. Furthermore, the Department does not conduct site visits to confirm training is actually delivered as documented in the program application. As a result, there is no assurance that advanced funds are used for their intended purpose.

*Recommendation 3.26*
**The Department of Economic and Rural Development and Tourism should require Workplace Innovation and Productivity Skill Incentive program recipients to provide documentation confirming that training has started prior to receipt of funding.**

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*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation, and has already implemented it. The WIPSI program provides preliminary contributions of 50% and 90% of approved funding when the company indicates by email that training has started. The program now requires that confirmation that training has started is also received from the trainer prior to disbursement of funds. The program is also reviewing the practice of providing preliminary contributions as part of the ERDT Service Excellence Initiative.*

3.80    *Monitoring* – There is little to no monitoring of financial assistance programs provided by the Department of Economic and Rural Development and Tourism. The Department relies on the fact that, with the exception of one program we tested, financial assistance is supposed to be based on the reimbursement of eligible project costs. While this could provide some assurance that funding is used for its intended purposes, many of the issues discussed in this chapter illustrate that the Department does not always follow its policies. We identified instances in which recipients received funding with no proof project costs were incurred; in other instances, the evidence provided that funds were spent as planned was weak and inconclusive. Some programs provide assistance for specific capital projects, training initiatives or equipment; site visits are an effective way to verify compliance with funding terms and conditions. For example, the Capital Investment Incentive program requires that all equipment funded be used in Nova Scotia. For companies with operations in multiple jurisdictions, this can only be confirmed through site visits by Department staff. We understand that the Department may not be able to visit all sites and may need to consider visiting a sample of sites to confirm funding was used as intended.

> *Recommendation 3.27*
> *The Department of Economic and Rural Development and Tourism should develop a monitoring framework for all funding programs that utilizes site visits and third party corroboration to confirm projects are occurring as intended.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation, and will develop a monitoring framework for programs at a departmental level.*

*The Department is working with the independent Internal Audit Centre to develop an overall departmental plan to improve program systems, processes and compliance. Part of this process will be to look at a risk-based approach to defining when site visits and third party corroboration is needed.*

3.81    *Quality review* – There is no department-wide process to review funding programs. As a result, weaknesses in guidelines and the assessment of applications are not identified. A review process administered by

Departmental staff external to the funding program could identify instances of noncompliance and promote process improvement.

**Recommendation 3.28**
**The Department of Economic and Rural Development and Tourism should develop and implement a funding program review process. The review should be conducted by staff external to the funding program and focus on determining whether application assessment and funding disbursement are in compliance with program guidelines.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation, and will develop a funding program review process at a departmental level for all programs.*

*The Department is working with the independent Internal Audit Centre to develop an overall departmental plan to improve program systems, processes and compliance. Part of this process will be to look at establishing check-lists, self-assessment processes and external compliance reviews. These processes will also include feedback to support continuous improvement.*

## Program Performance

Conclusion and summary of observations

The majority of funding programs administered by the Department have no documented goals or objectives and no process outlining how the programs will be evaluated. Only four programs were assessed during our 33-month audit period and we found these assessments were not adequate. Finally, while goals and objectives are documented for the Jobs Fund, there is no established process to evaluate the impact of the Fund's financial assistance.

3.82 *Program goals and objectives* – The Department has not developed measurable goals and objectives for 11 of 14 programs we tested (excluding the Jobs Fund). Several of these programs had broad goals; however they are not specific enough to be measured. Detailed goals and objectives are necessary to measure the success of funding programs and the efficient and effective use of government resources.

**Recommendation 3.29**
**The Department of Economic and Rural Development should develop specific and measurable goals and objectives for each funding program.**

**Department of Economic and Rural Development and Tourism Response:**
*The Department agrees with the recommendation and it has been immediately*

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*implemented.  ERDT has been developing program specific and measurable goals. This audit reviewed 10 out of 28 ERDT programs.  Of these 10, 50% were entirely new programs which were introduced during the audit period (April 2010 to December 2012).  Another two programs had significant program revisions in this period.*

*In April 2013 (after the audit period), ERDT introduced a broad performance measurement framework in its 2013-14 Statement of Mandate (SOM).   All of ERDT's programs will have specific measurable goals which align with department-wide outcome measures.*

3.83   *Program performance review* – Only one of 14 programs outlines how program performance should be reviewed.  This program had been in place for a year as of January 2013 but performance had not been reviewed at the time of our audit fieldwork (midway through 2013).  For two of the three programs in which goals and objectives exist, there is no process outlining how program performance will be assessed against these goals and objectives, including the frequency of review.

3.84   Similar to other funding programs, there is no performance review process for financial assistance through the Jobs Fund.  The Department provides significant financial assistance to businesses to promote economic activity.  Performance reviews are necessary to determine if funding initiatives are accomplishing their intended goals and objectives and government resources are being used in the most effective and efficient manner.

3.85   *Program performance* – Program performance reviews were not completed for 10 of 14 funding programs administered by the Department.  For the four remaining programs, the evaluations were limited.

3.86   The Student Career Skills Development Program is reviewed annually by surveying program participants.  Since there are no documented goals and objectives for the program, there is no link between the information being gathered by the department and program performance.  Furthermore, surveys are not completed in a timely manner.  The most recent survey completed was for 2011-12; 2012-13 was still in progress when this chapter was written.

3.87   The Productivity Investment Program was reviewed five months after it was established in January 2011.  Since this program was new, the review focused on program statistics such as the number of applications reviewed, approved and rejected, along with details on the successful applicants, such as the industry in which they operate.  The program had not been in operation long enough to gather information on the outcomes of the financial assistance.

3.88   The Productivity and Innovation Voucher program provides financial assistance to encourage companies to engage in research and development

initiatives with academic institutions.  Funding is provided directly to the academic institution at the completion of the project.  Program performance review has been limited to a March 2011 report focusing on recipients within a specific sector.  Again, much of the information captured dealt with program administration.  While there are goals and objectives for this program, these were not assessed.

3.89 The Productivity and Innovation Voucher Program also relies on reports provided by academic institutions that provide feedback on the program at the completion of the project.  However, feedback is not requested for the company using the services provided by the academic institution.  It is important to obtain feedback from the end user of the service to ensure the program is meeting their needs.

*Recommendation 3.30*
*The Department of Economic and Rural Development and Tourism should develop and implement a regular performance review process for all funding programs, including the Jobs Fund.  The process should outline the frequency of review and document the measures to be used in assessing program goals and objectives.*

*Department of Economic and Rural Development and Tourism Response:*
*The Department agrees with the recommendation and it has been immediately implemented. ERDT will continue to implement and document the review process.*

*In 2010, ERDT adopted a portfolio approach for performance reviews with:*

- *Routinely monitored annual performance measures*
- *Evaluations of program impact every 5 years*
- *Strategic case studies and qualitative information to support continuous improvement and learning*

*However, during the audit period, 70% of the programs were new/changed. Priority was place on ensuring annual monitoring first, as outcome changes take time and formal evaluations would take place in 5 years.  In 2011-2012, ERDT launched a central information and data repository (CIDR) facilitating routine monitoring data collection and analysis across all programs.  The regular performance review process will outline frequency and measures.*

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## Economic and Rural Development and Tourism Additional Comments

ERDT values these recommendations and plans to make enhancements in its policies and procedures as part of its continuous improvement agenda.   ERDT has already implemented 20 of these recommendations.  These changes will add to the improvements that have already been done over a short time.

ERDT appreciates the observations and recommendations of the OAG in this and previous audits, and will work hard to address these issues as we continue to improve operational practices.   The observations regarding program management will improve the department's ability to demonstrate good stewardship of resources and transparency for citizens.

The observations regarding value for money will ultimately be for Executive Council, given Jobs Fund investments are used to support regional, economic and social policy objectives of government.   Whether or not these have been achieved or how best achieved in the future are policy decisions of Executive Council, as opposed to government officials.

# 4 Health and Wellness: Public Health Surveillance

## Summary

Nova Scotia's public health surveillance system is not adequate. An effective surveillance system provides information on trends and outbreaks of disease and guides improvements in long-term health for citizens. Although the Department of Health and Wellness has made improvements in recent years, significant changes are still needed to move Nova Scotia to an adequate public health surveillance system. Current information systems have limited functionality because they do not enable detailed analysis of disease data. The surveillance system does not address other areas of public health such as indicators of overall population health.

In 2006, a Department-prepared report noted that public health information systems were a source of inefficiency and vulnerability. This has not changed. The current system to report specific diseases has limited functionality and we found errors and omissions in data.

After years of involvement in a national project to develop an IT system for public health, Nova Scotia withdrew from the project in 2010. Three years later, there is still no comprehensive surveillance system. Our 2008 recommendation that the Department implement an electronic immunization registry has not been addressed.

The Province must also move towards surveillance of population health information. Rather than just examining why a person got sick, modern public health surveillance considers how to improve the overall health of the population. Currently, this information is ad hoc at best.
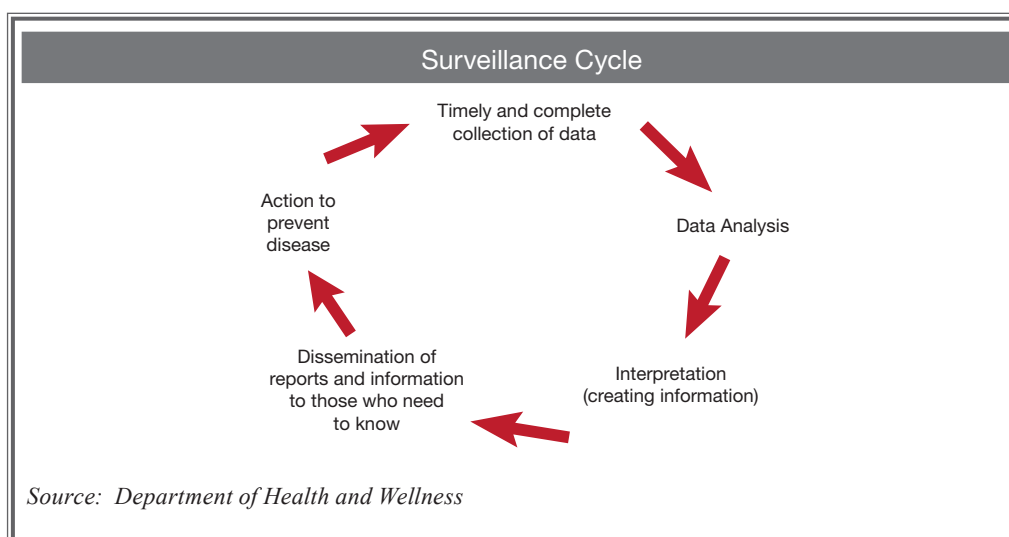
Progress addressing deficiencies identified in the Department's 2006 report on public health has been slow. Proactive leadership will be needed to ensure the Province addresses deficiencies. Implementing the recommendations in this report is an important step in moving towards an adequate public health system which supports programming, provides information on disease and helps improve overall population health.

Despite these issues, there have been improvements in recent years. Lab and epidemiological capacity have improved. The lab network has plans to deal with increased testing requirements of busy times such as during an outbreak, and the Province now has more epidemiologists. Recent developments such as public health standards and detailed protocols help identify what the future public health system should look like. However, there is no implementation plan detailing how these changes will be achieved; we recommended such a plan be developed immediately.

# 4 Health and Wellness:  Public Health Surveillance

## Background

4.1 Surveillance is a core function within public health.  It is a continuous cycle of data collection, analysis, interpretation, and reporting, followed by public health action to prevent disease and improve health overall.  An appropriate, modern public health surveillance system should be capable of helping to protect the province in the case of an outbreak while also helping to improve long term population health.  Without adequate surveillance systems the province will be ill-equipped to deal with disease outbreaks and unable to identify programs and approaches that will lead to an overall healthier population.



Surveillance Cycle

Timely and complete collection of data

Action to prevent disease

Data Analysis

Dissemination of reports and information to those who need to know

Interpretation (creating information)

*Source:  Department of Health and Wellness*

4.2 Public impact from the surveillance system is most noticeable during outbreaks or epidemics of communicable diseases.  Health officials rely on the surveillance system to identify the disease initially, monitor progress of the outbreak, and track the cause, allowing public health officials to prepare a plan of action.  An inadequate surveillance system exposes any jurisdiction to a higher level of risk that a potentially dangerous situation could go unnoticed, or that the public health system would lack sufficient information to deal with an outbreak.

4.3 The Health Protection Act assigns responsibility to establish guidelines and standards for health protection programs to the Minister of Health; the Chief Medical Officer of Health is responsible to develop a surveillance plan for notifiable diseases and conditions.  The diseases and conditions for which

labs, physicians and others must notify public health are documented in Regulations. The Department of Health and Wellness has established Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions which details the objectives, responsibilities, case definitions, timing and nature of notification, data collection forms, and required reporting for notifiable diseases.

4.4 At Health and Wellness, the Population Health Assessment and Surveillance division is responsible for surveillance through public health and the Chief Public Health Officer. District health authorities collect surveillance data through carrying out front-line public health responsibilities. The districts are also involved in other aspects of the surveillance cycle at a local level, including data analysis and interpretation. The extent of this analysis role is limited depending on the level of expertise in each district.

4.5 District health authorities are required to collect case data on notifiable diseases (such as salmonellosis, mumps or hepatitis C) for entry in a computerized database administered by the Department. The Health Protection Act requires labs, doctors, nurses, administrators at long term care facilities, and others to notify public health when they become aware of instances of notifiable disease.

4.6 The concept of public health surveillance extends beyond notifiable disease to include monitoring population health indicators; however, historically this has not been a focus of the Department. Chronic disease, social determinants of health, injuries and other areas are all referred to as non-notifiable disease work. Examples of these indicators, include growth and development of children, tobacco and alcohol use, and socio-demographics. In addition, there is a long list of preventative health practices which can be included in surveillance activities such as immunization rates, levels of physical activity, healthy eating, sexual habits, and breast feeding. All of these indicators can be useful in assessing programs and informing policy decisions.

4.7 In 2006, the Department reviewed public health in Nova Scotia. The *Renewal of Public Health in Nova Scotia: Building a Public Health System to Meet the Needs of Nova Scotians* identified 21 actions required for the system. A mid-course review reported on the progress to date in February 2012. This review identified many areas in which public health surveillance still required significant improvements. These concerns will be discussed later in this chapter.

## Audit Objectives and Scope

4.8 In the summer of 2013, we completed a performance audit of public health surveillance at the Department of Health and Wellness. This included surveillance of notifiable diseases and conditions and other population health indicators.

4.9 The purpose of the audit was to determine whether Nova Scotia's public health surveillance system is adequate to:

- identify and assess outbreaks and trends of notifiable diseases and conditions; and

- provide meaningful information on population health indicators.

4.10 The audit was conducted in accordance with section 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

4.11 The objectives of the audit were to assess:

- whether the objectives and goals of public health surveillance are adequately defined and communicated;

- whether the Department of Health and Wellness provides adequate oversight of public health surveillance conducted at the district and local levels;

- the Department's processes to ensure the data obtained through public health surveillance activities is timely, accurate and complete;

- the Department's process to determine the list of notifiable diseases and conditions for Nova Scotia, and whether Nova Scotia complies with national reporting requirements;

- how the Department determines which reports to prepare and their distribution;

- the adequacy of the Department's assessment of lab capacity;

- whether the Department is addressing epidemiologist capacity; and

- whether Nova Scotia is conducting adequate surveillance of population health indicators and using that information to inform policy decisions.

4.12 Certain audit criteria for this engagement were adapted from Accreditation Canada – Standards for Public Health Services (Qmentum Program 2010)

and the Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions. Other criteria were developed by our Office. The audit objectives and criteria were accepted as appropriate by senior management at public health.

4.13    Our audit approach included interviews with management and staff at the Department of Health and Wellness and nine district health authorities as well as review of documentation and testing notifiable disease case files for compliance with Department regulations, policies and procedures. We conducted our audit in the spring and summer of 2013, using case data from 2011 and 2012.

## Significant Audit Observations

### Governance of the Public Health System

Conclusions and summary of observations

Although public health has made improvements in recent years, significant changes such as those recommended in the 2006 Renewal Report have been slow. More recently, public health standards and detailed draft protocols were developed. Although these documents provide some guidance for public health, including assessment and surveillance, district health authority staff told us there is uncertainty regarding the direction of the public health system. Health and Wellness does not have clearly defined and well-communicated goals and objectives for public health surveillance. The Department needs to use the momentum from recent developments to move the system forward at a faster pace; overall goals and objectives must be established and communicated. The public health leadership team needs to take an active role to ensure everyone is working towards a common vision of public health in the future.

4.14    *Public health and overall health care system* – Public health is defined by the Department of Health and Wellness website as *"the art and science of improving and protecting health and preventing illness, injury and diseases through the organized efforts of society."*

4.15    The preventive nature of public health often results in impacts which may not be seen until years in the future. Outcomes are longer-term. For instance, the benefits of a campaign to promote more physical activity may not result in clear and measurable benefits for many years. Other areas of the health care system have tangible impacts which are more easily measured. For example, the number of hospital beds created or the reduction in wait times are both concrete and results may be seen over a shorter term.

4.16    Although the outcome of investments in public health may not be immediately measurable, an effective and efficient public health system will improve the overall health of the population in the long term, potentially reducing the burden of future health care costs. It is the responsibility of the leadership group within the public health system to make the case for supporting public health initiatives by clearly explaining the needs and benefits of investing in public health.

4.17    *Public health review* – In 2006, the Department of Health Promotion and Protection (has since merged with Health to create the Department of Health and Wellness) issued a comprehensive review of public health in Nova Scotia titled *The Renewal of Public Health in Nova Scotia: Building a Public Health System to Meet the Needs of Nova Scotians*.  It identified the core functions of public health as: population health assessment, health surveillance, health promotion, disease and injury prevention, and health protection.   The Report was completed, in part, due to the SARS outbreak and resulting reports addressing public health in Canada.  It identified several areas for improvement to renew the Province's public health system.

4.18    In February 2012, the Department of Health and Wellness assessed its progress towards addressing the recommendations from The Renewal Report. The review identified a lack of progress with regards to surveillance and the need for continued investment to support the system.  It also identified significant concerns with the state of public health's information technology infrastructure.   Surveillance system improvements, including better IT systems, are discussed throughout this chapter.

4.19    *Standards and protocols* – Public health standards were established in 2011. Rather than providing detailed requirements which the system must meet, these standards are high level statements documenting the direction of public health in the future.  For example, *"Public health strives to improve the health of the population overall and reduce health inequities among populations."* The standards mark a shift in emphasis in the strategic direction of public health as it moves its focus to overall populations rather than on individuals, working towards a better understanding of the situations and factors that allow people to be healthier rather than focusing on how to manage a person who is sick.  This approach is intended to ultimately result in a healthier population.

4.20    The Department intends to work towards the changes outlined in the standards over a five-year period.  Draft protocols have been developed.  These provide more detailed information to implement the standards.  They address areas such as planning and priority setting, partnerships, and program delivery. Examples of protocols include the following.
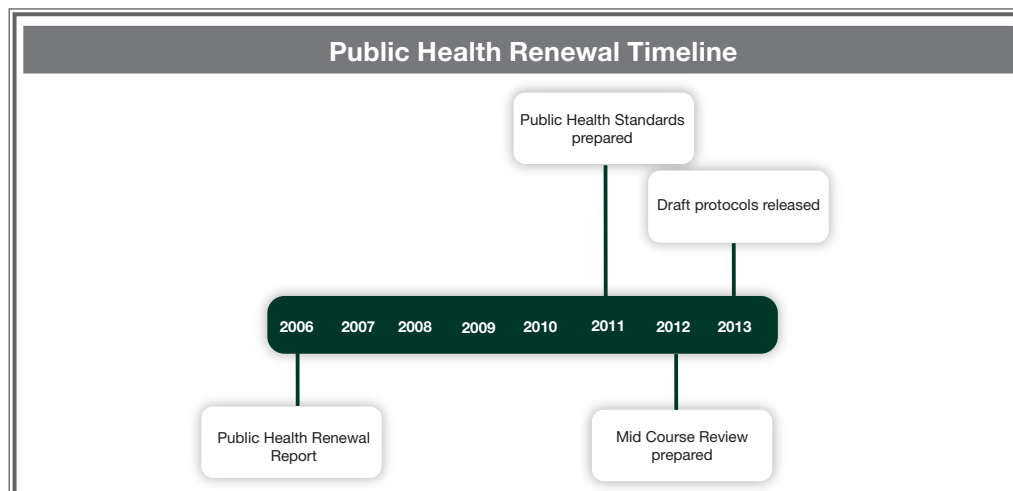
- *"Conduct assessment and surveillance of notifiable diseases and conditions in a manner which allows the identification of differences in local areas...*

- *Seek to influence the establishment and implementation of healthy public policies at federal, provincial and local levels to improve social determinants of health in order to improve the health of the population and reduce health inequities."*

4.21 The protocols were released to the public health community in June 2013. They have been accepted by public health senior leadership but have not yet been approved by Department management. These protocols are a significant step towards the public health system envisioned in the Public Health Renewal document. They outline key steps which public health must take but more detailed action plans are needed to implement change and align public health programming and systems with the protocols. To maintain momentum, an implementation plan must be developed quickly to ensure action is taken to bring the protocols into practice across the province.

4.22 *Lack of progress* – The Renewal Report was prepared in 2006, resulting in the standards in 2011 and draft protocols in 2013. The report described a public health system which needed significant change. Similarly, in our 2008 audit of Communicable Disease Prevention and Control, we recommended an immunization registry be developed; there has been no progress to date. Public health management acknowledge that a new information system which addresses the need for a registry, as well as a more robust surveillance system, is needed. Department management told us they are looking for a consultant to examine possible system solutions. This persistently slow pace is concerning. Senior leadership within public health and the Department of Health and Wellness must move the system forward with a greater sense of urgency to ensure Nova Scotia has a public health system capable of protecting the province in the case of an outbreak while also helping to improve long term population health in Nova Scotia.



**Public Health Renewal Timeline**

| | | | | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |

Public Health Standards prepared

Draft protocols released

Public Health Renewal Report

Mid Course Review prepared

4.23    Implementing the new approach envisioned in the standards and protocols will require more strategic leadership across the province.  Significant capacity and skills exist within the district health authorities at the senior leadership level, including Medical Officers of Health.  While the ultimate responsibility may lie with the Chief Public Health Officer, the expertise across the province will be invaluable to help move the system forward and ensure a consistent understanding at both provincial and district levels.

*Recommendation 4.1*
*The Department of Health and Wellness should expedite the approval process and move forward with the public health protocols in a timely manner.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation.  The internal DHW process for approval of the protocols is currently underway.  Direction for approval of the protocols will be sought from the new provincial government.*

*Recommendation 4.2*
*The Department of Health and Wellness should develop a plan to implement its public health protocols following approval.  The plan should include detailed timelines and involve input from stakeholders impacted by the new protocols.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation.  The protocols describe the work of Public Health and represent a shift in the emphasis of this work rather than a dramatic change in direction.  The shift has already begun in some areas (geographic and/or programmatic) as opportunity and partnerships have arisen. Once the protocols are approved, DHW will continue to work with District Health Authorities (Districts) and community partners to provide guidance and support for system-wide implementation of the protocols, including timelines.*

4.24    *Need for information systems* – Better information systems and more complete data will be important to achieving the public health protocols. Both the standards and protocols identify the need for surveillance data and information.  More detailed information will be required regarding non-notifiable disease public health indicators (such as demographic information or socio-economic status) and notifiable diseases and conditions (including incidence and  immunization rates) to assist staff in understanding and assessing public health responses and programs.  Given the limitations of the current information system, a comprehensive public health information system covering communicable disease surveillance, outbreak management, non-disease surveillance and an immunization registry is needed.

4.25    *Goals and objectives* – Although the Department has completed significant work in developing the standards and draft protocols, there are still no clearly

defined and well-communicated goals and objectives related to non-notifiable disease indicators.  Within the district health authorities and at the provincial level, there is a consistent understanding that the draft protocols will guide surveillance work going forward but clear, specific goals and objectives for public health surveillance are necessary.

4.26    District health authority staff expressed concerns regarding the overall vision for Nova Scotia public health surveillance.  Staff were unclear regarding goals and objectives, often stating that provincial goals would be at a higher level than local goals.  A clear, defined vision with goals and objectives would help ensure surveillance activities address needs at both provincial and district levels and would ensure staff at all levels understand the intended direction of the system.

4.27    Measuring performance is important in providing feedback to management at both the Department and districts on whether surveillance targets and milestones are being met and the intended outcomes are being achieved. The lack of defined goals and objectives makes measuring performance challenging as there is nothing against which to measure performance.

*Recommendation 4.3*
*The Department of Health and Wellness should clearly define and communicate goals and objectives for surveillance of non-notifiable disease indicators.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation. Historically, Public Health surveillance efforts in Nova Scotia have focused on notifiable diseases and conditions.  As a result, goals and objectives for this aspect of surveillance are articulated in the Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions, and well communicated within the public health system.*

*Given Public Health's shifting emphasis from individuals to populations, and a greater focus on addressing the determinants of health, Public Health acknowledges the need to enhance surveillance of non-notifiable disease and determinants of health.*

*An initial step in this direction is the development of a provincial health profile report by July 2014, and accompanying statement of the goals and objectives of this surveillance activity.  This report will provide a description of the health of the Nova Scotia population.*

*As surveillance activities for non-notifiable diseases and conditions expand, goals and objectives will be identified.*

# Data Quality And Information Systems

## Conclusions and summary of observations

The Department's surveillance system is not adequate to meet the Province's needs. The current notifiable disease surveillance system (ANDS) is considered obsolete and has limited functionality in certain areas.  For example, the system cannot record sufficiently detailed data for epidemiological analysis; this makes it more challenging to understand increases in specific diseases or outbreaks.  Staff often have to rely on paper files.  Additionally, we found numerous errors in the information recorded in ANDS which could make meaningful analysis more challenging.  Despite years of involvement in a national project, Nova Scotia effectively has no immunization registry.  Significant information system improvements are needed.

### *Surveillance Information Systems*

4.28  *Current system* – A Department of Health and Wellness report on the status of the province's public health system in 2012 indicated serious concerns with the state of the information technology systems.

> *"Immunization records continue to be held on cards and an information system for communicable disease surveillance, investigation and control has not been implemented.  This situation is a major source of inefficiency and vulnerability.  With the decision to not pursue implementation of Panorama, an alternative public health information system needs to be selected, funded and its implementation supported.  While immunization and communicable disease control information needs are the most urgent, the information management needs of other public health programmatic areas also need to be addressed."  (Source:  Renewal of Public Health in Nova Scotia – Mid Course Review)*
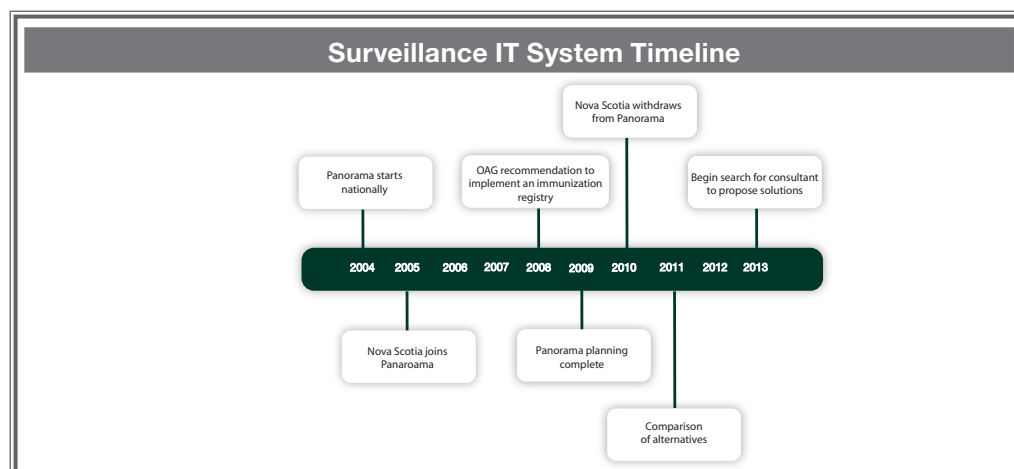
4.29  The Department uses a system called ANDS to track notifiable diseases and conditions as well as school immunization.  This system was developed by the Public Health Agency of Canada for its purposes.  The Agency allows the Province to use this system.  While the system is adequate for tracking basic notifiable disease case data, it has numerous deficiencies as a provincial surveillance system.

4.30  Department management told us the ANDS system is considered obsolete.  They noted it is becoming more difficult to resolve issues as the system is no longer supported and the IT expertise needed is becoming harder to find.  We found ANDS contains minimal data fields and cannot capture and analyze case detail at a sufficient level.  For example, it does not include notifiable disease risk factors which are needed for complete epidemiological analysis.

Staff at multiple districts told us they often rely on paper files instead.  This is concerning; the need to rely on paper files and the associated delays this can cause was identified as a deficiency of Ontario's public health system during the 2003 SARS outbreak.  If Nova Scotia were to face an outbreak of similar severity, it is unclear how the current system would handle it.

4.31    ANDS has limited reporting capabilities.   A separate query program is needed to report and analyze data.   Since the ANDS system is not owned by the Province, Nova Scotia has limited ability to make changes.

4.32    The inadequacy of the provincial information system to support surveillance work is highlighted by the efforts required by Capital District Health Authority to conduct surveillance work.

4.33    In order to have access to adequate data for analysis purposes, Capital Health maintains its own spreadsheet while also entering duplicate information into the ANDS system.  Capital Health's public health management told us ANDS is not capable of tracking and reporting the depth of data required for meaningful analysis, such as risk factors and detailed geographic location.  Most districts, including Capital Health, rely on paper files to obtain more information for in-depth analysis.

4.34    Due to the lack of an appropriate provincial system, Capital Health utilizes free software which was originally designed to support outbreak management in developing nations.  While it is encouraging to see Capital Health taking steps to enhance its surveillance activities, this emphasizes the state of the current system.  It has created an environment in which districts must develop ad hoc systems on their own, resulting in a piecemeal, disjointed provincial surveillance system.   A similar scenario was identified as a contributing factor to the challenges faced while investigating and managing the 2003 SARS outbreak in Ontario.

4.35    *Potential impact of poor systems* – The lack of an adequate information system to track communicable diseases, immunizations and other surveillance factors was identified as a contributing factor in the public health failures during the 2003 SARS outbreak in Toronto.  The systems were not adequate to handle an outbreak and in some cases relied on paper files for analysis.  Similarly, Nova Scotia's system is inadequate and relies on paper files for thorough analysis.

4.36    As discussed later in this chapter, public health faces constant pressure to attract and retain qualified staff, particularly epidemiologists.   We are concerned the lack of adequate information systems may pose an additional challenge for staffing.  Epidemiologists are in demand; the failure to provide staff with the basic technological tools necessary to complete their work may be a problem for the Nova Scotia public health system moving forward.

4.37   *Panorama* – The Panorama project started nationally in 2004 when the Federal government funded Canada Health Infoway to support the development of a Canada-wide public health surveillance system.  Nova Scotia began looking at this option as early as 2005, and by March 2009, had completed the planning phase to adopt Panorama.  Nova Scotia played a significant role in the early years of this project, but after completing the planning phase, decided to put the project on hold.  Public health management at Health and Wellness told us this was due to both the financial pressures involved with the project and continued delays nationally in getting a functional program.  In 2010, Nova Scotia decided to withdraw from the project.

4.38   By that time the Province had spent approximately $1.3 million on the Panorama project but determined it would be better to walk away from this investment.  Department staff believed there might be other programs which could meet public health's needs.  In 2011, the Department compared three programs: the most recent version of Panorama, a new program called Atlas, and the current patchwork system of programs in use by public health.  At that time, the only information on Atlas was a company-prepared briefing.  The Panorama review was based on a week-long testing process attended by two Department staff members.  While the review suggested Atlas was a more appropriate size and a cheaper option, it also concluded that further study was necessary.

4.39   As of October 2013, the Department is seeking a consultant to determine the needs and best solutions available for a new surveillance IT system.  Public health management told us capital requests must be submitted to central government far in advance.  Department management said it would likely be 2015-16 before implementation of a new system could begin.  We are concerned with this timeframe.  As discussed earlier, progress in public health has been slow.  The need for an appropriate public health surveillance system has existed for many years.  The Province must decide which system meets public health surveillance needs and move forward with a plan to implement that system immediately.

**Surveillance IT System Timeline**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Nova Scotia withdraws from Panorama | | | |
| Panorama starts nationally | | | OAG recommendation to implement an immunization registry | | | | Begin search for consultant to propose solutions | | |
| 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| | Nova Scotia joins Panaroama | | | | Panorama planning complete | | | | |
| | | | | | | Comparison of alternatives | | | |

> **Recommendation 4.4**
> **The Department of Health and Wellness should identify an appropriate information system for public health surveillance and work with Treasury Board Office to implement the system in a timely manner.**

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation. Public Health agrees with the audit's assessment of the inadequacy of our current electronic information systems.*

*In October 2013, a Public Health information system planning and assessment project was initiated. The project will document information needs and requirements for Public Health business areas including Communicable Disease Prevention and Control, Population Health Assessment and Surveillance, Healthy Development and Healthy Communities. The project will identify options for information system(s), propose how these options fit with existing e-health systems, and provide recommendations for implementation in the short term (1 year), medium term (3 years) and long term (5+ years). The project will be completed by March 2014 and will result in a DHW submission of a 2015/16 Tangible Capital Asset (TCA) request to the Treasury Board for implementation of the information system solution.*

*Implementation of the recommended solution will be dependent upon the success of the TCA request.*

4.40  *Immunization registry* – Our audit of Communicable Disease Prevention and Control in February 2008 included the following recommendation: *"The Department of Health Promotion and Protection should implement an electronic immunization registry for Nova Scotia."* At that time, the Department acknowledged the need for a registry in its response to our audit chapter.

> *"Nova Scotia is adopting the Panorama application province wide. The planning phase was completed in March 2007. The department is now preparing for implementation to begin in fiscal 08-09. It is anticipated this phase will take approximately two to three years to complete. It is also anticipated, given the current national project time lines, that front line public health staff in Nova Scotia will be using the Panorama application by late 2008 or early 2009"*

4.41  Almost six years after our report, Panorama has been abandoned and no replacement has been selected. Some immunization information is recorded in ANDS but the records are incomplete and issues identified during our 2008 audit regarding completeness of information reported by doctors remain unresolved. Management at public health acknowledged the current situation is not adequate.

4.42 Without a comprehensive immunization registry, a true understanding of the state of immunization in the Province is not available. This limits the Department's ability to manage outbreaks of vaccine-preventable disease, identify susceptible populations, and provide immunization policy guidance through epidemiological analysis.

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***Recommendation 4.5***
***The Department of Health and Wellness should implement recommendation 4.5 from our February 2008 Report to develop an electronic immunization registry.***

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***Department of Health and Wellness Response:***
*DHW agrees with this recommendation. In October 2013, a Public Health information system planning and assessment project was initiated. The project will document information needs and requirements for Public Health business areas, including immunization. The project will identify options for information system(s), propose how these options fit with existing e-health systems, and provide recommendations for implementation in the short term (1 year), medium term (3 years) and long term (5+ years). The project will be completed by March 2014 and will result in a DHW submission of a 2015/16 Tangible Capital Asset (TCA) request to the Treasury Board Office for implementation of the information system solution.*

*Implementation of the recommended solution will be dependent upon the success of the TCA request.*

### ANDS Data Testing

4.43 *Notifiable disease case testing* – We tested 260 notifiable disease case files from all district health authorities to assess the completeness, accuracy and timeliness of ANDS notifiable disease case data. We also tested to ensure required forms were completed and information entered in the system. While we did not have any issues with the timeliness of the information reported, we did identify a number of files in which the information in the paper file did not match the information recorded in ANDS.

4.44 20% (51) of the files we tested had blank fields or errors in the information recorded in ANDS. We are concerned by the lack of accuracy in recording data in ANDS as it suggests a lack of attention to detail by public health staff responsible for data entry. We understand that none of the errors we found would currently affect reporting from the ANDS system. However, public health staff told us that notifiable disease data needs to be very detailed to be useful. Having accurate data in ANDS could facilitate moving this data to a new system to provide some historical information. As improved systems are implemented, it is important for everyone in the public health system to

ensure all data is entered completely and accurately into the surveillance IT system.
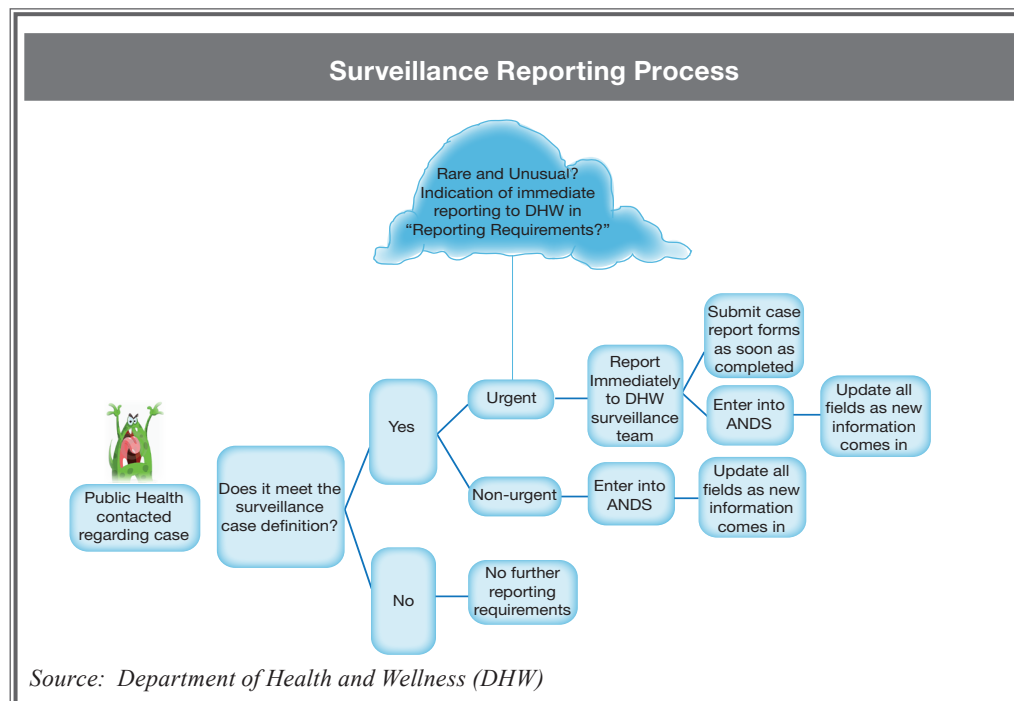
> **Recommendation 4.6**
> *The Department of Health and Wellness should require district health authority staff to implement a quality check to ensure completeness and accuracy of ANDS data fields.*

**Department of Health and Wellness Response:**
*DHW agrees with this recommendation.  In order to enhance data quality, Public Health staff at DHW routinely identify and inform District Public Health staff of data quality issues.*

*By July 2014, DHW will require District Public Health staff to implement a data quality check process.*

4.45    *Timeliness of case notification* – The Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions document which diseases must be reported to public health and provide timeframes for reporting.  Doctors and others (e.g., nurses, lab practitioners) are legally required to report these diseases to public health officials under the Health Protection Act.  Certain notifiable diseases require that public health be notified and the information entered in ANDS immediately.  Other notifiable diseases are entered in ANDS the following day.  The ANDS system operates with a one-day delay; once case data is entered it is available across the province the following day.  We did not note any issues related to timeliness in our case file testing.

**Surveillance Reporting Process**

*Source:  Department of Health and Wellness (DHW)*

4.46   *Completeness of case notification* – Management in the Population Health Assessment and Surveillance division at the Department told us they are confident with the completeness of notifiable disease and condition reports. Management said they have a good relationship with reporting labs.  They rely on confirmed lab reports and notification from physicians and others. The Department has a poster titled *It's the Law* to remind doctors and others of the legislated requirement to report.  We recognize there are practical limitations for assuring completeness of case reporting and are satisfied management has taken reasonable steps to help address this issue.

4.47   *Monitoring* – Regular monitoring of surveillance programs and activities ensures that programs are having the intended impact and functioning appropriately.  In Nova Scotia, districts collect information on notifiable diseases and are supposed to validate that data.  Our detailed testing of ANDS records showed a significant number of errors, primarily incomplete data fields.  We realize these errors would have little impact on the population health analysis in place at this time and we are aware that the current data validation process is not designed to capture errors at this level of detail. However, we feel it is important for both the Department and the DHAs to address these problems to ensure the data in the system is complete and accurate.  Recommendation 4.6 earlier in this chapter addresses these concerns.

4.48   Surveillance of non-notifiable disease programs is limited.  The Department has acknowledged that this is an area they are currently behind on.  Work has started to develop measures to evaluate these types of programs and senior management within public health have indicated this is something they will continue to work on.  As the Department moves forward with collecting this information, it will be important to develop goals and expectations to ensure data is accurate and collection processes are operating as intended. Surveillance of non-notifiable disease indicators is addressed later in this chapter.

## Data Analysis and Reporting

### Conclusions and summary of observations

We found that notifiable disease reporting has improved in recent years. Enhancements include the inclusion of rates/100,000 people, and expected number of cases by district health authority based on historical data.  Monthly reports are provided to public health stakeholders, while annual reports are available publicly. Although there is frequent contact between the epidemiologists who develop notifiable disease reports and end users of those reports, there is no process to assess user needs.  We recommended the Department address this by periodically

reviewing the reports with users to ensure their needs are met.  Provincial reporting of notifiable disease information to the federal government is voluntary; Nova Scotia participates in this reporting.

4.49   *Notifiable disease reporting* – The Department's Population Health Assessment and Surveillance division issues monthly reports on notifiable diseases to public health officials in Nova Scotia; annual reports are made available publicly.  Both reports include information on the number of the notifiable diseases by district health authority.  More recently, the reports have also included notifiable disease rates/100,000 people, and monthly reports include expected disease rates based on historical data by district.  Many of the district public health workers we spoke with noted these additions are positive improvements in reporting.  However, many also indicated the level of detail is still not sufficient for epidemiological requirements.  More specific details on location, population-wide socio-economic history, and other risk factor information would be extremely valuable in analyzing increases in disease rates and designing solutions to help improve overall population health.

4.50   We assessed annual and monthly reports for accuracy and completeness and found no issues.  The issues noted previously regarding testing of ANDS data would not have impacted the type of information included in these reports.  We also reviewed other public health reports during our audit but did not verify the source data was accurate.  Examples of other reports include a weekly Respiratory Watch report along with an annual influenza report, both of which are public reports.  In addition, PHAS conducts enhanced surveillance and has issued reports on other topics as needed, including Lyme disease and HIV/AIDS.

4.51   There is no formal process to periodically assess user reporting requirements.  Users include district epidemiologists, Medical Officers of Health and front line public health workers.  Epidemiologists in the Department's Population Health Assessment and Surveillance division review data and trends to help identify reporting priorities based on professional judgment and experience.  They rely on the fact that preparers and users of the reports are in frequent contact and have an opportunity to communicate any issues concerning surveillance reporting.  We believe formally reviewing stakeholder needs would help to ensure reporting meets user requirements and remains relevant.

*Recommendation 4.7*
*The Department of Health and Wellness should periodically review notifiable disease and condition reporting to ensure reports continue to meet user needs.*

71

***Department of Health and Wellness Response:***

*DHW agrees with this recommendation. Currently, stakeholder feedback on reports is conducted in an ad hoc manner. By October 2014, DHW Public Health will establish a formalized process for seeking feedback from stakeholders, including: Medical Officers of Health, Provincial and District Public Health staff, Infectious Disease Expert Group, and the Provincial Laboratory.*

*Additionally, Public Health has established a process for periodically reviewing and updating the list of Notifiable Diseases. The next review is scheduled to occur by April 2014.*

4.52 *Threat assessment* – The Population Health Assessment and Surveillance division assesses notifiable disease and condition threats on an ongoing basis. Provincial activity may be identified using ANDS, as well as the electronic lab reporting system. The Canadian Network for Public Health Intelligence is a Federal program which monitors national and international threat information. It provides alerts related to events and outbreaks of provincial or national concern. Additionally, there are provincial and national communicable disease committees which also assess potential threats.

4.53 *Notifiable disease list updates* – Public health has a process for maintaining the provincial list of notifiable diseases and conditions. The list was last updated, through a change in regulations, in April 2012. The Department has a Notifiable Disease Working Group which is responsible for reviewing, recommending and implementing changes to the list and case definitions of notifiable diseases and conditions.

4.54 *Notifiable disease reporting to Federal authorities* – Provincial reporting of notifiable diseases to the Federal government through the Public Health Agency of Canada is voluntary. We found the province provided information every May for the previous year during our audit period. In addition, there is a Memorandum of Agreement between Nova Scotia and the Government of Canada regarding the placement of a Public Health Agency field surveillance officer at the provincial Department of Health and Wellness to support enhanced surveillance of HIV/AIDS, sexually transmitted infections and other notifiable diseases. We found regular data sharing specified in the memorandum was fulfilled in the audit period. We also found the province responded to the Public Health Agency's ad hoc requests for data.

4.55 *Field surveillance officer position vacancy* – The Public Health Agency of Canada field surveillance officer position as outlined in the memorandum with the Agency has been vacant since February 2013. The reporting requirements in the agreement are being fulfilled by provincial Department staff. While we understand the relationship between the Population Health Assessment and Surveillance division and the Agency is one of mutual benefit, provincial staff have taken on additional responsibilities while this position has been vacant.

*Recommendation 4.8*
*The Department of Health and Wellness should work with the Public Health Agency of Canada to fill the field surveillance officer position under the terms of its memorandum of agreement with the Agency.*

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation. As the Field Surveillance Officer (FSO) is a Public Health Agency of Canada employee, the Agency's Human Resource hiring processes are being followed. Since the position became vacant in February 2013, DHW has maintained regular contact with the Agency to highlight the importance of filling this position, to get updates on the hiring process, and to request participation in the hiring process.*

*The timeline for filling of the FSO position is dependent upon the Public Health Agency of Canada hiring process, which are outside the control of DHW.*

## Laboratory And Epidemiological Capacity

Conclusions and summary of observations

The Department of Health and Wellness assessed lab capacity in the Provincial Public Health Lab Network and made changes to address potential challenges of high volumes such as during an outbreak. Management at the Department and in labs across the Province told us they believe these changes allow the lab network to support public health surveillance functions as well as respond to a surge in demand. The Department has also taken steps to improve epidemiological capacity and address vacancies. Several districts now have epidemiological support available within their district.

4.56   *Provincial Public Health Laboratory Network of Nova Scotia* – Lab testing for communicable diseases is performed by the Provincial Public Health Laboratory Network of Nova Scotia. Public health labs are located across the province, with the main lab located at the QEII Health Sciences Centre in Halifax. When a notifiable disease is identified in a lab, the Public Health Lab Network forwards the results to the appropriate contact at the Department or applicable district health authority where further actions may be taken depending on the notifiable disease.

4.57   *Laboratory capacity* – Surveillance activities relating to notifiable diseases rely on results from lab testing to identify positive cases for reporting purposes. Since lab services support public health surveillance of notifiable diseases, it is important for the Department to ensure lab capacity is sufficient to assist public health surveillance efforts.

4.58 The Public Health Lab Network completed an assessment of lab capacity in 2009. This assessment determined that the capacity of the Network to assist in surveillance activities of notifiable diseases is adequate. Management and staff told us there is a strong working relationship between the Provincial Public Health Laboratory Network and the Department. This relationship assists in identifying and responding to non-routine notifiable disease cases or trends.

4.59 Our July 2009 audit of Pandemic Preparedness identified concerns with whether lab capacity could meet the needs of the province in a pandemic or other high-volume situation. We reviewed the Network's 2009 assessment of lab capacity and discussed the issues with management. We found all parties believe the Public Health Lab Network is prepared to deal with a surge in testing capacity requirements. Testing procedures were altered based on the assessment to focus on higher risk cases in times of heavier volume. Lab management indicated this change has been accepted in labs across the country and has reduced the risk of capacity problems in an outbreak scenario.

4.60 *Epidemiological capacity* – Epidemiologists play an integral role in the surveillance cycle. Data analysis, interpretation and reporting are all completed by epidemiologists. Therefore, an effective public health surveillance system must have adequate epidemiological capacity to conduct these functions. Since the draft public health protocols will put a greater focus on total population health, sufficient epidemiological capacity will become even more important.

4.61 Nova Scotia has traditionally had difficulty attracting and retaining epidemiologists. Epidemiologists are in high demand across Canada and in the past, salaries in Nova Scotia were considered low. The Department has recently taken steps to improve its ability to attract and retain epidemiologists by having the positions reclassified to a higher pay level.

4.62 As of September 2013, the Department's Population Health Assessment and Surveillance division had four full-time epidemiologists employed by the Province. Although there were three epidemiologists in the past, two of those were often placed with the province by the Public Health Agency of Canada. These individuals took direction from the Agency and could be reassigned at any time to deal with issues elsewhere in the country. The recent provincial hires represent an improvement in epidemiological capacity in the Province.

4.63 Several district health authorities also have epidemiologists on staff, either through direct employment with the district, sharing one position between multiple districts, or through placement of Public Health Agency of Canada employees. The four districts currently without epidemiologist expertise indicated they are in the process of recruiting for a shared service position.

## Additional Surveillance Efforts

### Conclusions and summary of observations

Surveillance of non-notifiable disease indicators is limited. There are some situations in which non-notifiable disease surveillance occurs, typically related to specific programs. Department staff acknowledge that improved surveillance data is needed. A common list of population health indicators was approved in March 2013. The Department needs to move forward with collecting and reporting on non-notifiable disease indicators.

4.64 *Non-notifiable disease surveillance* – Modern public health systems should include a focus on a broader range of surveillance areas, including indicators such as obesity, alcohol consumption, and breast feeding rates. Historically, the emphasis has been on notifiable disease surveillance. Public health staff at the Department and in districts saw this as a deficiency which must be addressed. Reporting of population health indicators is usually on an ad hoc basis and does not always involve Department public health surveillance staff. For instance, we were told addiction services collected alcohol and tobacco use data related to its programming.

4.65 The lack of adequate surveillance information can create challenges for some program areas. For example, while breastfeeding rates and duration are considered important indicators, the Department has no data on breastfeeding duration. Similarly, public health plays a role in Thrive!, a government-wide strategy to improve the health of Nova Scotians. In order to assess this program, in-depth population health information will be needed.

4.66 As discussed earlier, public health standards and recently-developed protocols outline the direction that public health intends to move towards in the future. The protocols include non-notifiable disease indicators for analysis, priority setting and monitoring. In order to provide information on these areas, detailed data will be required which may not currently exist. This ties back to the need for improved public health information systems discussed earlier in this chapter.

4.67 *Community Health Profile Network* – In 2011, a group comprised of Department and district health authority public health representatives was formed to help develop a list of common non-notifiable disease indicators, with a focus on the social determinants of health. The indicators were finalized in March 2013; initial reporting is expected over the following year. Management told us that the data available may not be at a sufficiently detailed level to appropriately analyze population health matters.

| Community Health Profile Network | | |
|---|---|---|
| | **Indicator** | **Data Source** |
| Who we are | Population by age-group | Statistics Canada Census |
| | Selected socio-economic statistics (SES Index) maps | Nova Scotia Community Counts |
| | Life expectancy at birth | Statistics Canada Census |
| | Citizenship/immigration | Statistics Canada Census |
| What affects our health | Current smoker | Canadian Community Health Survey |
| | Heavy drinking | Canadian Community Health Survey |
| | Active/moderately active physical activity | Canadian Community Health Survey |
| | Fruit and vegetable consumption | Canadian Community Health Survey |
| | Expenditure >30% household income on rent | Statistics Canada Census |
| | Food security | Canadian Community Health Survey |
| How healthy are we | Health-adjusted life expectancy at birth | Statistics Canada Census |
| | Stress | Canadian Community Health Survey |
| | BMI - adult - overweight/obese | Canadian Community Health Survey |
| | Lone parent (psychosocial deprivation) | Statistics Canada Census |
| | Low income | Statistics Canada Census |
| | Less than grade 12 education | Statistics Canada Census |
| | Diabetes prevalence | Nova Scotia Diabetes Care Program |
| | Injury limitation | Canadian Community Health Survey |

*\* The table above provides a sample of the Network's indicators.*

*Recommendation 4.9*
***The Department of Health and Wellness should implement its plans to collect and report non-notifiable disease indicators and work toward obtaining the more detailed data needed to analyze indicators.***

*Department of Health and Wellness Response:*
*DHW agrees with this recommendation.  The development of a provincial health profile report is underway.  The report format, outline of the report contents and the data analysis plan have been drafted.  The report will provide a description of the health of the Nova Scotia population through reporting of disease and condition indicators other than notifiable disease indicators.  The process of developing the report will assist in identifying limitations and gaps in data.  This provincial health profile report will be completed by July 2014.*

4.68   *Access to data* – Some of the data useful in non-notifiable disease surveillance originates from the Department of Health and Wellness' Business Intelligence Analytics and Privacy group.  This includes information from the Canadian Community Health Survey, Statistics Canada, and other sources.  Public health management told us they have had issues obtaining data from this group in a timely manner.  For example, data requested for a public health indicators pilot project took nearly a year to receive.

4.69   Since assessment and surveillance is a core public health function, access to required data is important.  Information which already resides in the Department should be made available to public health as needed for analysis.  Moving forward, this will be increasingly important as public health standards and protocols are implemented with an increased emphasis on the surveillance data related to social determinants of health.

> ### Recommendation 4.10
> **The Department of Health and Wellness should require that all data held in, or accessible by, the Department be available to the Population Health Assessment and Surveillance team as required.**

**Department of Health and Wellness Response:**

*DHW agrees with this recommendation.  DHW Public Health is working with internal partners to access required data, while adhering to privacy policies.  To date, Canadian Community Health Survey (CCHS) data has been made available to Public Health.*

# 5 Labour and Advanced Education: Occupational Health and Safety

## Summary

The Occupational Health and Safety Division at the Department of Labour and Advanced Education is responsible for investigations and inspections related to workplace safety. We found the Department's investigations into serious workplace accidents are adequate. However there was insufficient evidence in inspection files to determine whether occupational health and safety inspections were adequately carried out.

Although workplace safety is a shared responsibility, an effective regulatory process is key to success. Practices among inspectors such as preparation of inspection reports, obtaining recipient sign off and collecting evidence of compliance with orders, are not consistent. Checklists which focus on the risk areas an inspector should be examining during an inspection would serve to help ensure all essential risk areas are addressed.

Orders issued by inspectors to address health and safety weaknesses are not adequately followed up to ensure corrective action is taken. 1,228 orders (32%) issued from April 2012 to March 2013 where not complied with by the date required. Yet, inspectors issued only 10 summary offense tickets for violations or noncompliance during that time. The significant rate of noncompliance is concerning. Additional guidance on follow-up and the types of situations and outstanding orders that would warrant a summary offence ticket is needed. Although the seriousness of the deficiencies identified may vary, timely action is necessary to properly mitigate the related risks to health and safety in the workplace.

Improvements in operational planning and monitoring are also needed to ensure high-risk workplaces are targeted for inspections. There are a significant number of workplaces subject to the provisions of the Occupational Health and Safety Act in Nova Scotia – many more than practical for Department staff to regularly inspect. Management uses Workers' Compensation Board information to identify higher-risk industries; however, more specific inspection targets need to be developed and monitored to ensure resources are directed primarily to higher-risk workplaces.

Management does not use the Department's information system to its fullest potential. Information that could be useful to management is not collected or is not collected in a consistent manner. Additionally, the Department's file review process is not functioning. The Department does not have a system to log and track complaints to ensure all complaints received are recorded and investigated. We recommended that the Department establish such a process.

# 5 Labour and Advanced Education: Occupational Health and Safety

## Background

5.1    The Occupational Health and Safety Division of the Department of Labour and Advanced Education promotes the responsibility of employers and employees to create safe and healthy workplaces through the use of safe work practices, adequate training and suitable equipment.  The Division conducts worksite inspections to assess compliance with the Occupational Health and Safety Act and associated regulations, and carries out investigations into serious workplace-related incidents and fatalities.

5.2    The foundation of the Occupational Health and Safety Act is an internal responsibility system, which is based on the principle that employers, contractors, and employees *"share the responsibility for the health and safety of persons at the workplace."*   The Act further clarifies the internal responsibility system is:

> *"supplemented by the role of the Occupational Health and Safety Division of the Department of Labour and Advanced Education, which is not to assume responsibility for creating and maintaining safe and healthy workplaces, but to establish and clarify the responsibilities of the parties under the law, to support them in carrying out their responsibilities and to intervene appropriately when those responsibilities are not carried out."*

5.3    The Division is responsible for the following regulations under the Occupational Health and Safety Act.

| Regulation | Description |
|---|---|
| Occupational Health and Safety First Aid Regulations | Addresses first aid training for employees and requirements for first aid |
| Occupational Safety General Regulations | Addresses a variety of topics including personal protective equipment, ventilation, lighting, sanitation, mechanical safety, tools, electrical safety and premises and building safety |
| Violence in the Workplace Regulations | Addresses acts or threats of violence which endangers the safety of an employee in designated workplaces |
| Workplace Hazardous Materials Information System (WHMIS) Regulations | Addresses controlled products used, stored or handled at a workplace |

| Regulation | Description |
|---|---|
| Temporary Workplace Traffic Control Regulations, and the Fall Protection and Scaffolding Regulations | Addresses temporary workplaces (e.g. roadworks), and fall protection requirements. Consolidated under the Workplace Health and Safety Regulations, effective June 12, 2013 |
| Occupational Health Regulations | Addresses establishing workplace limits related to gases, vapors, mists, smoke, dust and other chemicals. Responsibility was transferred from the Health Protection Act to the Occupational Health and Safety Act, Workplace Health and Safety Regulations in June 2013 |
| Underground Mining Regulations and the Blasting Safety Regulations | Addresses assorted mining and blasting technical requirements including training for supervisors, qualifications of staff, handling of detonators, etc. |
| Occupational Diving Regulations | Addresses requirements for diving operations conducted at a workplace |
| Occupational Health and Safety Administrative Penalties Regulations, and the Occupational Health and Safety Appeal Panel Regulations. | Provides for payment of an administrative penalty for contraventions of the Occupational Health and Safety Act, and an appeal process |

5.4　Additionally, the Department enforces the Smoke-free Places Act and regulations.

5.5　The Division is organized into two sections: Inspection and Compliance Services; and Investigations, Technical and Internal Services.  Inspection and Compliance Services inspectors provide services to promote safe and efficient work practices, including compliance with regulations, codes and standards.  Investigators assigned to Investigations, Technical and Internal Services conduct complex investigations of serious workplace incidents, such as work-related fatalities and serious injuries. The Technical Services section provides technical expertise in occupational hygiene, mining, blasting, radiation, oil and gas, and paralegal services.

5.6　For operational purposes, one executive director provides oversight for the province's three regions.  Each region has a regional director responsible to oversee the activities of the Occupational Health and Safety officers assigned to the region.  Investigators with Investigations, Technical and Internal Services report to a manager of investigations located in the Department's head office.  There are 31 inspectors and 5 investigators in the Division.

5.7　In 2011-12, the Division conducted 1,048 inspections, investigated 898 complaints, and 244 incidents.  3,964 orders were issued and 13 prosecutions initiated.

5.8     In 2001, we conducted an audit of the Occupation Health and Safety division when it was part of the Department of Environment and Labour.

## Audit Objectives and Scope

5.9     In the fall of 2013, we completed a performance audit of the Occupational Health and Safety Division at the Department of Labour and Advanced Education.  The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

5.10    The objective of the audit was to determine whether the Department's occupational health and safety inspection, investigation, and enforcement programs are adequately designed and implemented to manage workplace safety risks for the protection of employees.

5.11    Generally accepted criteria consistent with the objective of the audit did not exist.  Audit criteria were developed specifically for this engagement using both internal and external sources.  Criteria were accepted as appropriate by senior management of the Department.

5.12    Our audit approach included interviews with Division management and staff; documentation of systems and processes; testing of inspection and investigation processes and procedures; and examination of legislation and policies. Our audit period included activities conducted between April 1, 2012 and March 31, 2013.

## Significant Audit Observations

### Risk-based Planning

Conclusions and summary of observations

The Division uses Workers' Compensation Board information to identify higher-risk industry sectors for targeted inspections.  However, management needs to provide more specific direction and oversight to be effective.  The Division does not set inspection targets for specific high-risk workplaces.  The Division does not set specific targets for inspectors, such as number of inspections or percentage of time that should be spent on the targeted industries.  The Division needs to develop and monitor provincial, regional and inspector-specific targets to ensure higher

risk workplaces are receiving sufficient coverage.  Our analysis of 2011 Workers' Compensation Board data and 2012-13 inspection information showed only 27 of the 100 workplaces with the highest risk rating were inspected.

5.13    *Roles and responsibilities* – The Occupational Health and Safety Act outlines the shared responsibility of employers and employees, among others, for the health and safety of persons at the workplace.  The role of the Division is to supplement this internal responsibility by establishing and clarifying standards, supporting persons in the workplace in carrying out their responsibilities, and intervening when those responsibilities are not carried out.

5.14    *Risk-based planning* – In our 2001 audit of the Occupation Health and Safety Division, we noted the Occupational Health and Safety Division did not use current information to determine the number of workplaces covered under the Occupation Health and Safety Act.  The Division now has access to the Nova Scotia Business Registry and Workers' Compensation Board of Nova Scotia information for a more complete and up-to-date listing of workplaces covered under the Act.

5.15    In our 2001 report, we also reported that the Department of Environment and Labour did not have a rigorous approach to targeting higher-risk workplaces for inspection.  The Division now has access to Workers' Compensation Board information on industry claims for planning purposes.  The Division uses the information to identify higher-risk industry sectors for targeted inspections.

5.16    In addition to the targets established for the Division, inspectors identify two to six inspections annually, based on risk factors specific to their territory.  Inspections as a result of a workplace incident or complaint have a higher priority than the targeted inspections.  Other inspections as a result of inspectors' knowledge and monitoring of their territory have the lowest priority.  In choosing which workplaces to focus on, some inspectors use Workers' Compensation Board information for their area.  Some inspectors indicated the majority of their time is spent responding to incidents and complaints, leaving very little time to focus on targeted or ad hoc inspections.

5.17    While the Division identifies higher-risk industry sectors for inspections, it does not provide more specific inspection targets, such as number of inspections or percentage of time that should be spent on the targeted industries.  The Division also does not have a list of specific higher-risk workplaces to be inspected in the year.  With over 53,000 workplaces under the Occupational Health and Safety Act in Nova Scotia and a limited number of inspectors to monitor them, the Division needs to ensure its resources are being used to their greatest effect.  Guidance to inspectors at the regional

83

level, detailed in an annual plan, would help ensure they focus their efforts on Division targets and risk areas within their region.  The regions could then evaluate inspection results against the plan to determine if targets were met and where adjustments need to be made.

> ### Recommendation 5.1
>
> **The Department of Labour and Advanced Education should establish inspection targets for the Occupational Health and Safety Division and its regions to ensure inspection staff focus their efforts on the higher-risk industries identified by the Department.  Inspection targets should be documented in an annual plan and monitored.**

### Department of Labour and Advanced Education Response:

*The Department agrees with the recommendation.  In 2014-15, the Occupational Health and Safety division will begin this process by adopting additional goals and staff targets for the higher-risk industries.  In 2015-16 and as part of the five year Workplace Safety Strategy released this year, the division will engage in a fuller planning process at the provincial and regional levels.*

> ### Recommendation 5.2
>
> **The Department of Labour and Advanced Education should evaluate inspection results against the annual plans to determine if targets were met and where adjustments need to be made.**

### Department of Labour and Advanced Education Response:

*The Department agrees with the recommendation.  In addition to the current performance management process and the goals that have already been set in this current year, OHS management will evaluate staff activities against the additional goals adopted as per recommendation 5.1.  In 2014-2015, the division will move into a fuller evaluation against annual regional plans on a go forward basis.*

5.18    We obtained Workers' Compensation Board information from the Occupational Health and Safety Division for the 2011 calendar year, as well as inspection data from April 2012 to March 2013.  We did not audit this information for completeness.  We analyzed the Workers' Compensation Board information to determine the 10 industry sectors with the highest risk rating based on a number of factors, such as workers compensation claims. We then analyzed inspection information and determined 84% of inspections completed focused on the top six industries.    Due to limitations with the data (not all inspections were linked to an industry sector), this analysis did not include all inspections.

5.19    When we examined the inspection history for the 100 workplaces with the highest risk rating based on our Workers' Compensation Board analysis, we found only 27 of the top 100 had been inspected since April 2012.  Our analysis

showed the health and social services industry had the highest risk rating. We found only 15 (30%) of the 50 highest-risk entities were inspected.

5.20    Overall, our analysis indicates that while industry sectors with higher risk ratings are being inspected, more focus needs to be directed to the health and social services sector as well as to the higher risk workplaces. Implementation of our recommendations will assist the Division in determining appropriate inspection coverage and where adjustments are needed.

5.21    The Division has no process to notify inspectors when a new workplace opens in their area.  Inspectors rely on information from their communities, as well as observations from monitoring their territory, to know when a new workplace opens.  Awareness of new workplaces is important information to enable inspectors to monitor workplaces in higher-risk industries on a proactive and timely basis.  While it would not include every new workplace that falls under the Occupational Health and Safety Act, regular updates of new businesses registered through the Nova Scotia Business Registry and Workers' Compensation Board would assist inspectors in being aware and up-to-date on new workplaces in their territories.

*Recommendation 5.3*
*The Department of Labour and Advanced Education should communicate with the Nova Scotia Business Registry and Workers' Compensation Board to establish a process to obtain information on registered new businesses on a regular basis.*

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation.  The OHS division is currently working to improve its awareness of new businesses as stated in the Workplace Safety Strategy, with a focus on businesses identified in the high risk sectors.  The OHS business client within the Amanda Activity Tracking System (ATS) currently interfaces with the Registry of Joint Stocks Companies (RJSC) to validate Business Information.  The Province, through SNSMR, is planning to replace and enhance the current RJSC system over the next two years.  It is the division's intention to take a more proactive approach with new businesses with the new RJSC system, ideally in 2015-16.*

## Compliance and Enforcement

### Conclusions and summary of observations

Investigations into serious workplace accidents are adequate.  However, key aspects of the inspection and enforcement process need to be improved.  We

found inconsistences in inspection practices, including the information recorded in inspection reports, whether recipients sign off on reports, and evidence of compliance with orders.  There was insufficient evidence in the files to determine whether inspections were adequately and appropriately carried out.  We recommended checklists be developed to provide guidance to staff and permit manager assessment of the extent and appropriateness of the inspection completed.  We found management approval for extension of compliance orders was not always obtained when the extensions exceeded 60 days.  32% of orders issued from April 2012 to March 2013 were not complied with by the date required.  Only 10 summary offense tickets were issued during the 2012-13 period.  The Division needs to provide guidance regarding follow up and enforcement of outstanding orders.  Additionally, the Division does not have a complaints logging and tracking system to ensure all complaints received are recorded and appropriately addressed.

5.22   *Inspections* – Inspectors carry out their inspections based on occupational health and safety regulations.  They use manual notebooks and laptop computers, linked to the Division's activity information system, to record inspection information.  Inspectors note violations of the regulations in an inspection report and issue warnings or orders to address the deficiencies.  A copy of the inspection report and orders issued is provided to the appropriate person at the workplace.  The activity information system provides a template, with references to applicable regulations, which inspectors use to prepare inspection reports and compliance orders.

5.23   Inspection reports and other documentation provide evidence of the nature and extent of the inspections carried out.  We examined 60 inspection files to determine if inspections carried out were appropriate and in accordance with Division policies.  There was insufficient evidence in the files to determine whether inspections were adequately and appropriately carried out.  However, we found inspection reports were issued and orders clearly outlined the deficiencies and corrections required.

5.24   From our examination, we found variation in practices between inspectors in completing the inspection report.  Some reports were more comprehensive, outlining areas examined and both positive and negative results.  Other reports only indicated deficiencies that needed to be addressed.  For the less detailed reports, we could not determine the extent of the inspection carried out and whether it covered all necessary areas.

5.25   The Division does not have checklists for inspectors to indicate which sections of the regulations were examined, other than for reviewing the occupational health and safety committee structure and training at a workplace.  Checklists which focus on the risk areas an inspector should examine would serve to ensure all essential risk areas were reviewed during an inspection.  The Division is responsible for a number of regulations and checklists would help inspectors focus on the high risk areas.  Inspectors told us that checklists

would be useful in carrying out inspections.  Checklists would also assist managers, when reviewing files, to assess the extent and appropriateness of the inspections carried out.

### Recommendation 5.4
**The Department of Labour and Advanced Education should develop and implement inspection checklists.**

**Department of Labour and Advanced Education Response:**
*The Department agrees with the recommendation. The OHS division does maintain some checklists, and is interested in providing guidance to staff to assist with doing their jobs more effectively. The division will explore the development of relevant additional checklists to enhance current practice in this area in 2014-15.*

5.26    Policies and procedures are established to ensure practices are carried out in an appropriate and consistent manner.  The Occupational Health and Safety Division's inspection procedures outline the general inspection process, including issuing of reports and orders.  We noted two areas in which some inspectors do more than required by the policy.

5.27    The Division does not require the workplace recipient to sign the inspection report.  However, some inspectors have the recipient sign the report to acknowledge receipt.  From our testing of 58 inspection reports, we noted 25 (43%) were signed by the recipient while 33 (57%) were not.  Having the recipient sign the inspection report provides evidence that the inspection was completed and that the recipient received the report and any related compliance orders.

### Recommendation 5.5
**The Department of Labour and Advanced Education should request that recipients sign inspection reports as acknowledgement of receipt of the reports and related orders.**

**Department of Labour and Advanced Education Response:**
*The Department agrees with the recommendation in principle.  Current practice does not require a signature; rather, the name of the individual being served the inspection report and /or order is noted on the report.  In 2014-15, the OHS division will conduct an analysis on the best way to confirm that the document has been received and ensure consistency of practice of the determined solution.*

5.28    Orders outline the section of the Act or Regulation under which the order was issued, the action needed to correct the deficiency, and the timeframe for completion.  The person who is issued the order is required to return a compliance notice to the Division, noting the action which was taken to

correct the deficiency. The Division does not require evidence of compliance be provided other than the completed order document. From our testing of 60 files containing 128 orders, 52 orders (41%) included evidence of compliance while 71 (55%) did not. Five orders were rescinded so no evidence of compliance was considered. Orders for violations that pose a higher safety risk should receive more scrutiny and should require stronger proof of compliance. Evidence of compliance, for example sales receipts for items purchased or certificates of inspection or completion, supports that a deficiency was addressed.

*Recommendation 5.6*
*The Department of Labour and Advanced Education should require evidence of compliance with orders be obtained for violations that pose serious health and safety risks.*

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation. The Occupational Health and Safety Act currently requires the submission of a compliance notice from the recipient of the order to assert they have complied with the order. In the interest of consistency and certainty that those violations that pose serious health and safety risks are indeed complied with, the OHS division will review the existing inspection standard operating procedure to determine reasonable evidence of compliance based on risk in 2014-2015.*

5.29  The Division does not have standard times for recipients to comply with an order. Inspectors indicated the length of time can vary from the day an order is issued, such as for a stop work order, to 30 days or more. Inspectors use their judgment when setting a compliance date. Recipients can request an extension beyond the original compliance date, if needed. If a compliance date extends beyond 60 days from the date of issue of the order, approval by the manager is required. From the 60 inspection files we examined, 12 had compliance dates greater than 60 days. Two (17%) of the 12 files indicated the manager had approved the extension over 60 days. For the remaining 10 files (83%), there was no evidence managers had approved the extensions.

*Recommendation 5.7*
*The Department of Labour and Advanced Education should monitor to ensure approval is obtained and documented in the files for extensions to compliance order dates greater than 60 days.*

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation. This policy for approval of extension exists in current standard operating procedures. The OHS division recognizes that we need to take a further look at this policy to ensure approval is obtained and documented before an extension is granted. The division will review the policy this year.*

5.30  *Investigations* – Investigations are carried out when there are serious workplace incidents and fatalities.  Investigations are undertaken to identify the cause and determine if all legal requirements were being followed at the time of the incident.  Fatality investigations require at least two officers involved during the preliminary stage, to ensure a thorough investigation can be completed in a timely manner.  Investigations may also be completed in cases of allegations of discriminatory action against individuals exercising the right to refuse unsafe work practices.

5.31  Once an investigation is complete, the investigator prepares a report and recommends what action should be taken, such as prosecution or closing of the file.  Managers monitor ongoing investigations and consult with the investigators on progress of the files.  Department senior management are involved when a recommendation to prosecute is made.

5.32  We examined 20 investigation files and found the investigation procedures carried out were in accordance with the Division's policies.  For six files in which a recommendation was made for prosecution, there was evidence senior management reviewed the file.  Three of the 20 investigations were not completed within six months, as specified in the Division's policies.  All three had ongoing activity and the timelines were reasonable.

5.33  We found managers reviewed 14 (78%) of the 18 completed files.  We found no evidence of review for four files (22%) and the remaining two investigation files were not complete at the time of our testing.  There were seven files in which at least two officers should have conducted the preliminary investigation.  However this did not happen for one of the seven files.  In that case, the fatality incident occurred on the weekend and only one officer was assigned to investigate.

**Recommendation 5.8**
**The Department of Labour and Advanced Education should comply with its policy concerning manager review of investigations.**

**Department of Labour and Advanced Education Response:**
*The Department agrees with the recommendation.  The OHS division staff currently makes every effort to comply with this policy and will continue to do so.  The division will also review the policy in this current year to ensure its effectiveness and identify improvements.*

**Recommendation 5.9**
**The Department of Labour and Advanced Education should comply with its policy concerning two officers attending at the preliminary investigation of a workplace fatality.**

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation.  The OHS division staff currently makes every effort to comply with this policy and will continue to do so.  The division will also review the policy in this current year to ensure its effectiveness and identify improvements.*

5.34   *Enforcement* – To ensure compliance with regulations, inspectors can issue warnings and orders for corrective action.  If a violation has occurred, or corrective action as ordered by the inspector is not taken, inspectors can issue a summary offence ticket.  Summary offence tickets impose a fine on the offender and may be paid by out-of-court settlement.  The minimum fine is $462 and maximum is over $800.  Inspectors may also initiate procedures to prosecute if serious violations have occurred.

5.35   We analyzed activity systems data for April 2012 to March 2013 to determine how often orders were met by the compliance date specified.

- 65% (2,500 orders) were completed by the compliance date.

- 32% (1,228 orders) were not completed by the date required.

- 26 orders (1%) were still outstanding at the end of the year.

- For the 1,202 orders completed after the compliance date, the average number of days for compliance after the due date was 15 days, with a range from one to 252 days.

- For 139 orders (3%), a compliance date was not entered into the system.

5.36   The Division has limited guidance for inspectors to follow up the outstanding orders they issued.  The decision to issue a ticket for noncompliance with the regulations or an order is at the discretion of the inspectors.  We found only 10 summary offense tickets were written for the 3,867 orders issued.  Providing guidance on the types of situations and outstanding orders that would warrant a summary offence ticket would better ensure inspectors responded consistently and appropriately in those situations.

*Recommendation 5.10*
**The Department of Labour and Advanced Education should develop and implement policies and procedures that provide guidance to inspectors on follow up and enforcement of outstanding orders.**

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation.  The OHS division is committed to improved workplace safety and to this end has recently reviewed its compliance system, from the issuance of orders to administrative penalties.  While we are*

*satisfied in the time period reviewed that workplace parties complied with more than 95% of orders, we want to be as strategic as possible with the resources we have to influence their future safety behavior.  The division will review its policies and procedures in 2014-15 to ensure appropriate follow-up and enforcement of outstanding orders.*

5.37    In 2010, under the Occupational Health and Safety Administrative Penalties regulations, the Department established an administrative penalty system.  The intent of administrative penalties is to encourage voluntary compliance with health and safety laws.  Upon assessment by Division staff, administrative penalties may be issued for violations under the Occupational Health and Safety Act.  Orders written under certain sections of the Act, such as Section 52 – Power to require reports, assessments and tests, are not assessed for administrative penalties.  Penalties can range from $100 to $2,000, depending on the individual involved, the efforts to prevent a violation, and the harm or potential harm the violation causes to any person.  Penalties may also be increased if the individual or employer receiving the penalty had received another penalty in the prior 3 years.  Staff indicated administrative penalties are not assessed until an order has been completed and closed.

5.38    Of the 176 orders from the 80 inspection and investigation files we examined, 142 orders required review to determine if an administrative penalty should be issued.  The Division had not reviewed 39 of those orders (28%) for possible administrative penalties.   Staff indicated this was due to a backlog as a result of the changeover of staff responsible for assessing and administering penalties.

5.39    The number of orders issued and the percentage of orders not completed by the date required may indicate enforcement tools are not being used or are not effective.  Penalties may lose their effectiveness as an incentive for compliance if they are not administered on a timely basis.  The Department indicated it is reviewing the framework and operation of the administrative penalty system, with completion expected by the end of 2013 or early 2014; any new system should consider that penalties should act as an incentive for compliance.

5.40    *Complaints* – Complaints or workplace incidents are normally reported to the Division using a 1-800 number.  Staff forward complaint and incident details to the officer responsible for the territory where the complaint originated. Staff also email details of the complaint or incident to the officer and the manager.   For serious incidents, staff contact the officer by phone with the same information.  Division policy requires all urgent and non-urgent complaints be recorded in the activity information system.

5.41    Staff told us copies of the emails sent to the officers and managers are maintained in an electronic folder, but the complaint information is not

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entered into the activity information system as required until the officer investigates the complaint. Staff indicated difficulties with accessing or amending information in the system as reasons why the information was not entered when initially received.

5.42 Officers may also receive complaint calls directly from complainants. The Division does not require officers to enter those complaints in a log or the activity information system when the complaint is first received. Complaints made directly to an officer may be handled by the officer and not come to the attention of the manager until the investigation has been completed and recorded in the system.

5.43 Failure to record complaints in the activity information system when first received could result in complaints not being responded to in a timely manner. There is also a risk that a complaint may not be responded to and the Division may not be aware of this. Complaints are an important part of the Division's history of a workplace and should be appropriately recorded when received.

*Recommendation 5.11*
*The Department of Labour and Advanced Education should establish a complaint logging and tracking system to ensure all complaints received are recorded in the activity information system and investigated in a timely manner.*

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation. Currently the OHS division has a practice of maintaining electronic copies of complaints. A formalized complaint tracking system would alleviate administrative burden on the officers, provide a fail-safe method to ensure all complaints are tracked and assist the division to collect valuable associated information, such as types and locations of the complaints. The division will conduct a preliminary analysis this year to determine cost, feasibility and timeframe for a complaint tracking system.*

5.44 After-hours calls are handled through an external service provider. The service provider collects the details of the complaint or incident, and notifies the appropriate manager. The managers are responsible for determining whether an officer needs to be contacted and dispatched immediately, or if the matter can wait until the next day.

5.45 The Division's policies assign highest priority to incidents and complaints. The Department's 2012 Annual Report showed an average response time of six days between receipt of a complaint or incident and start of an inspection or investigation. From our testing of 27 complaint files, we found an average response time of 5.3 days. Response times ranged from less than 1 day to 63 days. Our testing indicated action on serious incidents and complaints was taken in a timely manner.

5.46    Performance standards would provide specific guidance to staff on response expectations for the types of incidents and complaints the Division receives. Standards would help the Division in determining whether expectations were met and where additional attention was needed.

> ***Recommendation 5.12***
> ***The Department of Labour and Advanced Education should develop and implement performance standards for response times to incidents and complaints.***

***Department of Labour and Advanced Education Response:***
*The Department agrees with the recommendation.  Complaints and incidents are normally dealt with quickly, with imminent danger complaints and incidents being addressed immediately, as pointed out in the report.  It makes sense that staff be supported as fully as possible to carry out their duties, including having clear direction on response times articulated for complaint and incident types, including those of low and medium risk.  The OHS division will begin work on this recommendation in this year and work towards full implementation in 2014-2015.*

## Monitoring and Management Information Systems

Conclusions and summary of observations

The Division's activity information system can provide relevant and timely information to managers.  However, management does not use the system to its fullest potential.  The time inspectors spend in carrying out their activities is not recorded.  Management does not monitor whether inspectors regularly update their laptops with the activity information system, which could result in lost inspection information.  The Division needs to review its system to make better use of its capabilities and monitor system updating by inspectors.  The Division's file review process is not functioning and it cannot be sure inspectors are carrying out inspections in a thorough and consistent manner.

5.47    *Policies* – The Department has developed policies and procedures to provide guidance to staff.  These cover a number of areas, such as inspections, investigations, complaints and case management.  The policies are updated periodically, as needed.  At the time of our audit, several of the policies were in the process of being revised.

5.48    *Activity information system* – The Division has a central database for use by staff and management to record inspections, investigations and other activity.  The system captures information such as name of business, date of inspection, and compliance orders issued.  Management uses statistical

information generated periodically from the system to monitor Division activity, by inspector, by region and for the entire Division. Management may also obtain ad hoc reports, as required, to meet their needs in monitoring divisional operations.

5.49    We found the information system is adequate in its ability to provide relevant and timely information. However, we also found the system is not being used to its full potential due to several factors described below.

5.50    *Completeness of information* – Inspectors often generate their inspection reports remotely using mobile software on their laptop computers. Division policy requires staff to connect their laptops to the central system at regular intervals so the database is complete and up to date. Management does not monitor to ensure this requirement is met. Without frequent updating to the central information system, there is increased risk of data loss if a laptop is damaged or stolen. This could have serious consequences if a compliance order is not addressed and there is no follow up by the inspector because the order was not recorded in the system.

> **Recommendation 5.13**
> **The Department of Labour and Advanced Education should monitor whether inspectors are updating the activity information system as frequently as required.**

**Department of Labour and Advanced Education Response:**
*The Department agrees with the recommendation. The OHS division has a policy in respect to monitoring the updating of information by inspectors, which is being followed, however the current Activity Tracking System cannot confirm or deliver this data. The division will investigate in 2014-2015 the possibility of incorporating this functionality into the Activity Tracking System to monitor this information.*

5.51    *Time or activity reports* – The information system can be used to track time spent by inspectors in completing their activities but the Division does not require inspectors to track their time. If the Division collected information on activities and completion time, it would provide valuable information to management for planning and utilizing staff resources. It would also aid in the development of performance standards and monitoring of staff performance. Without time tracking, there is incomplete information available to determine whether time spent on inspections and investigations is reasonable.

> **Recommendation 5.14**
> **The Department of Labour and Advanced Education should utilize a time tracking system to develop performance standards for planning and monitoring.**

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation in principle in respect to the development of performance standards.  However, time tracking has been challenging within the existing information system and its value undetermined.  The OHS division will review in 2014-2015 appropriate data sources to determine and set the most appropriate performance standards.*

5.52    *Data gaps* – We examined a variety of reports and observed a number of cases in which information was not provided.  For example, for inspections classified as incidents or complaints, the system allows for classification of the type of complaint or incident (such as fall protection, discriminatory action).  This information is not always recorded.  Gaps in information reduce management's ability to complete trend analysis on most common types of incidents and complaints.  Such trend analysis could aid in isolating industries with more risk and provide support for targeting certain industries or businesses for inspections.

*Recommendation 5.15*
**The Department of Labour and Advanced Education should review system information capabilities to determine what information should be collected in order to fully utilize the system for analysis and decision making.**

*Department of Labour and Advanced Education Response:*
*The Department agrees with the recommendation.  The better the OHS division mines the data it has access to, the more strategic the division can be in determining how to use the resources available to it.  The division will begin a review of information system capabilities and assess needed system improvements in 2013-2014.*

5.53    *File review process* – The Division has a policy requiring periodic management review of inspection and investigation files.  Management told us that file reviews are done but are not documented according to the policy requirement; the prescribed review form was not used and not all managers were signing off on a file after completing a review.

5.54    There were 28 files that had been signed off as reviewed.  There was no evidence of the extent of the review completed on these files.  A complete and consistent review process would provide management with assurance that regulations are being adequately monitored for compliance, policies and procedures are being consistently followed, and inspectors are using appropriate professional judgment.

*Recommendation 5.16*
**The Department of Labour and Advanced Education should implement a file review process for inspection and investigation files that includes documentation of the review and sign off by the manager.**

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***Department of Labour and Advanced Education Response:***

*The Department agrees with the recommendation.  The OHS division is confident that files are being reviewed through current practice, however, understands the benefit of better documenting this practice.  This recommendation will be addressed in 2013-2014.*

### Department of Labour and Advanced Education Additional Comments

As stated in paragraph 5.2 of this report, the Occupational Health and Safety Act sets out that workplace parties are ultimately responsible for health and safety in the workplace and clarifies the role of the OHS division to support these parties in carrying out their responsibilities.  The division remains vested in and focused on operating in a strategic, professional and effective manner and looks forward to implementing the recommendations to this end.

In 2013-14, the Province, in partnership with the Workers' Compensation Board, launched its five year workplace safety strategy.  This strategy represents new activity, founded on research and comprehensive stakeholder consultation, and lays out four goals to improve workplace health and safety, through injury prevention:

1.     Nova Scotia workplace safety performance will be among the best in Canada.

2.     Leaders at all levels and across all sectors will demonstrate a commitment to and be accountable for safety in Nova Scotia workplaces.

3.     The safety culture in Nova Scotia will continuously improve and evolve.

4.     All workplaces will have access to and use the services and resources they need to assist them in achieving competency in workplace safety and improving their safety performance.