

October 2019

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

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October 29, 2019

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,

MICHAEL A. PICKUP, FCPA, FCA

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Auditor General of Nova Scotia

5161 George Street Royal Centre, Suite 400 Halifax, NS B3J 1M7

Telephone: (902) 424-5907 Fax: (902) 424-4350 Website: https://oag-ns.ca OAG NS

https://www.facebook.com/Office-of-the-Auditor-General-of-Nova-Scotia-434965506899059/

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Table of Contents

	Reporting on Financial Audit Engagements	9
	Key Matters from 2019 Audits Requiring our Attention	15
	Appendix I: Reporting on Financial Audits	21
	Appendix II: Independent Auditor's Report	
	Appendix III: Summary of Significant Control Weaknesses	
2	Nova Scotia's Finances from 2019 Public Accounts	27
	Purpose	29
	Financial Indicators – What they show	29
	Sustainability	30
	Flexibility	36
	Vulnerability	37
	Financial Highlights	38
	Other Observations	41
	Appendix I: Nova Scotia's Population	43
3	Cybersecurity, Purchasing Cards, and Follow-up on Prior Year Observations	
3	Purpose	47
3	PurposeCybersecurity	47 47
3	Purpose Cybersecurity Purchasing Card Risk Management	47 47 52
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management	47 47 52
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions	47 47 52 53
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management	47 47 52 53
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions Update on Internal Meetings and Employee Social Events Expenses	47 47 52 53 57
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions Update on Internal Meetings and Employee Social Events Expenses Appendix I: Management's Responses from Government Departments Regarding Certain Aspects of a Fraud Management Program Appendix II: Management's Responses from Public Service Units Regarding	47 52 53 57 58
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions Update on Internal Meetings and Employee Social Events Expenses Appendix I: Management's Responses from Government Departments Regarding Certain Aspects of a Fraud Management Program Appendix II: Management's Responses from Public Service Units Regarding Mandatory Fraud Training Completion Rates	47 52 53 57 58
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions Update on Internal Meetings and Employee Social Events Expenses Appendix I: Management's Responses from Government Departments Regarding Certain Aspects of a Fraud Management Program Appendix II: Management's Responses from Public Service Units Regarding Mandatory Fraud Training Completion Rates Appendix III: Management's Responses from Government Organizations	47 52 53 57 58 59
3	Purpose	47 52 53 57 58 59
3	Purpose	47 52 53 57 58 59
3	Purpose	47 47 52 53 57 58 59
3	Purpose Cybersecurity Purchasing Card Risk Management Update on Fraud Risk Management Update on Public Sector Pensions Update on Internal Meetings and Employee Social Events Expenses Appendix I: Management's Responses from Government Departments Regarding Certain Aspects of a Fraud Management Program Appendix II: Management's Responses from Public Service Units Regarding Mandatory Fraud Training Completion Rates Appendix III: Management's Responses from Government Organizations Regarding Certain Aspects of a Fraud Management Program Appendix IV: Management's Responses from Nine of the Province's Significant Organizations Regarding Evaluating and Reporting on the Effectiveness of Its Fraud Risk Management	47 47 52 53 57 58 59
3	Purpose	47 47 52 53 57 58 59

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Chapter 1 Financial Audit Work Results

Key Messages

- Nova Scotians can rely on government's financial information including that of the Nova Scotia Health Authority and the IWK Health Centre
- 2019 is the first year our Auditor's Report of the Consolidated Financial Statements of the Province of Nova Scotia draws attention to the accounting for contaminated sites
- While financial statements are reliable and many processes work well, significant control weaknesses need to be fixed at two government departments and four government organizations
- Key matters that required additional attention were contaminated sites liabilities, pension and retirement obligations, tax revenues, and purchasing cards

Details Around Key Messages

Nova Scotians can rely on the financial statements of both the Province and its organizations

- For the 19th year in a row, the Province of Nova Scotia received a clean audit opinion on its financial statements
- The 2019 Auditor's Report of the Consolidated Financial Statements of the Province emphasizes the uncertainty around future remediation costs of the Province's contaminated sites and notes the accounting meets standards
- Revenues in the Province's 2019-20 budget were reasonable and fairly presented
- Most government organizations, such as the Nova Scotia Health Authority and the IWK Health Centre, received clean opinions on their 2018-19 financial statements

Significant control weaknesses at two departments need to be fixed to improve the government's financial controls

- Department of Service Nova Scotia and Internal Services:
 - · purchasing goods and services without pre-approval, risking achieving value-for-money
 - not monitoring user access to the Province's accounting system, risking unwanted access
- Department of Lands and Forestry:
 - not adequately assessing the extent of contamination at the Province's abandoned mine sites, risking unknown financial exposure and unaddressed human health concerns

Significant control weaknesses at four government organizations need to be fixed to improve financial controls

- Housing Nova Scotia: poor restrictions and monitoring of user access to system
- IWK Health Centre: poor segregation of duties in finance and procurement, poor monitoring and tracking of capital assets
- Nova Scotia Gaming Corporation: no process to implement accounting-related recommendations of external advisors
- Nova Scotia Health Authority: incomplete internal control environment, poor monitoring of capital assets, and inconsistent review of employee timesheets

Previously identified significant control weaknesses were not fully addressed

- Cape Breton-Victoria Regional Centre for Education: weak controls over school-based funds
- Halifax-Dartmouth Bridge Commission: lack of segregation of duties within its finance department
- IWK Health Centre: poor restrictions and monitoring of user access to its billing system
- Strait Regional Centre for Education: weak controls over school-based funds and lack of segregation of duties for accounting personnel

Significant control weaknesses previously reported were addressed in 2018-19

- · Halifax-Dartmouth Bridge Commission: addressed lack of segregation of duties within key IT-related functions
- IWK Health Centre: addressed no reconciliation of billings relating to out-of-province patients



Key matters requiring additional attention during the audit of the Province's Consolidated Financial Statements were accounted for correctly

Key Matter	Resolution			
\$87 million increase in contaminated sites liabilities relating to Boat Harbour, abandoned mines, and other contaminated sites (2019 - \$372 million; 2018 - \$285 million)	 Accounted for correctly as estimates based on Government's assumptions Disclosed in the financial statements as subject to change and having significant measurement uncertainty as the Province continues to refine its cleanup plans 			
• \$2.6 billion employee future benefit liability; \$378 million paid out for retirement allowances	Accounted for correctly and properly disclosed			
\$5.1 billion in tax revenues	Accounted for correctly as estimates based on Government's assumptions			
Purchasing cards (PCards)	 Weak controls and transactions with missing documentation noted No impact on audit opinion 			

Questions Nova Scotians may want to ask:

- 1. How and when will the Department of Service Nova Scotia and Internal Services fix the significant weaknesses over departmental purchasing and who is holding the Department accountable for fixing these weaknesses?
- 2. Why did the Department of Lands and Forestry not have a detailed plan in place to conduct environmental assessments of abandoned mine sites?
- 3. Why are there multiple new significant control weaknesses at Housing Nova Scotia, IWK Health Centre, Nova Scotia Gaming Corporation, and Nova Scotia Health Authority in 2018-19 and who is holding these organizations accountable for fixing these weaknesses?
- 4. Do the significant control weaknesses identified at the Department of Service Nova Scotia and Internal Services, Housing Nova Scotia, IWK Health Centre, Nova Scotia Gaming Corporation, and the Nova Scotia Health Authority increase the risk of fraud and error?
- 5. Why are there repeating weaknesses in internal controls at Cape Breton-Victoria Regional Centre for Education, Halifax-Dartmouth Bridge Commission, IWK Health Centre, and Strait Regional Centre for Education and who is holding these organizations accountable for fixing these weaknesses?
- 6. As more information becomes available, how will the accounting estimates for the cleanup of Boat Harbour and the abandoned mine sites impact the financial position of the Province?

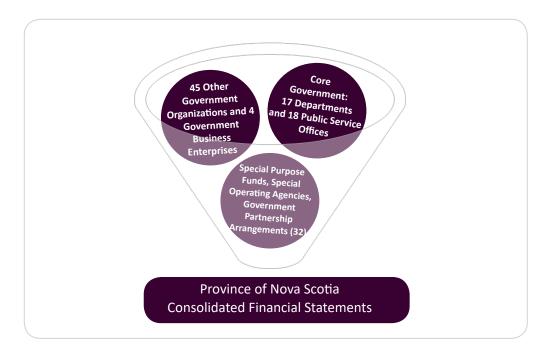


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Financial Audit Work Results

Reporting on Financial Audit Engagements

- 1.1 The objective of this chapter is to provide summary comments on the results of the financial audit of the Province's Consolidated Financial Statements and of the many organizations that are part of the Government of Nova Scotia.
- 1.2 The Auditor General Act (the Act) establishes the Auditor General's mandate, responsibilities, and powers. The Act also provides the Office with the mandate to audit all parts of the provincial public sector, which includes government departments and organizations. The Act also stipulates that the Auditor General shall audit the annual Consolidated Financial Statements of the Province.
- 1.3 The following diagram shows that the Consolidated Financial Statements of the Province are an accumulation of the assets, liabilities, revenues, and expenses of all the activities and organizations that it controls.



1.4 To exercise our mandate we formally rely, through auditing standards, on private accounting firms to conduct audits on the majority of government organizations. Our Office conducts the audit of the Province's Consolidated Financial Statements, as well as the audits of the following government organizations:



- Nova Scotia Health Authority
- Izaak Walton Killam Health Centre (IWK Health Centre)
- Nova Scotia Legal Aid Commission
- House of Assembly
- 1.5 As part of our audit of the Consolidated Financial Statements of the Province, we compile the results of financial audit work from the individual audits of all government organizations. Appendix I shows how these audit results are ultimately reported to the House of Assembly through our annual financial report.



Government provides Nova Scotians with financial information they can rely on

- 1.6 For the 19th year in a row, the Province of Nova Scotia received an unmodified opinion on its consolidated financial statements from the Auditor General of Nova Scotia (see Appendix II). An unmodified opinion, or what is commonly referred to as a "clean" audit opinion, means that an auditor has no significant concerns about the quality of the information reported in the financial statements. This is an accomplishment that governments over the past 19 years should be proud of, and we believe that receiving a clean opinion is a reasonable expectation of Nova Scotians, including elected officials and other users of the Province's financial statements.
- 1.7 The Province's Consolidated Financial Statements were prepared in accordance with Canadian public sector accounting standards and we conducted our audit of them in accordance with Canadian auditing standards. Under these standards, an organization can receive a clean opinion while at the same time have weaknesses in its financial controls. This is because the objective of a financial statement audit is to provide an opinion on whether the financial statements are fairly presented.



Emphasis of matter included in the Independent Auditor's Report of the Province's Consolidated Financial Statements for the first time

- 1.8 This is the first year our Independent Auditor's Report of the Province's Consolidated Financial Statements emphasized a specific financial matter facing the Province. In our Independent Auditor's Report, we emphasized the accounting of costs related to cleaning up the Province's contaminated sites because of the nature and uncertainty of these costs, as well as the current and potential future financial significance to the Province.
- 1.9 The following is the emphasis of matter included in our 2018-19 Independent Auditor's Report of the Province's Consolidated Financial Statements.



Emphasis of Matter - Accounting for Contaminated Sites

I draw attention to Note 1 and Note 10 of the March 31, 2019 consolidated financial statements of the Province of Nova Scotia which describe the accounting policy and the nature and details of the amounts recorded in the consolidated financial statements related to contaminated sites. This note outlines how the Province complies with accounting standards for environmental costs based on the key requirements of Canadian public sector accounting standards. This means that amounts are only recorded when a liability meets recognition criteria and can be reliably measured.

In the future, as additional environmental studies are completed, it may be possible that the Province will need to account for additional liabilities related to its contaminated sites if it determines that contamination exceeds an environmental standard, a reasonable estimate of the related remediation costs can be made, and it is expected future economic benefits will be given up to remediate the sites.

The March 31, 2019 consolidated financial statements of the Province of Nova Scotia fairly present the contaminated sites liability in accordance with Canadian public sector accounting standards.

My opinion is not modified in respect of this matter.

- 1.10 The 2019-20 Revenue Estimates used in the preparation of the annual budget address of the Minister of Finance and Treasury Board of Nova Scotia to the House of Assembly of Nova Scotia tabled on March 26, 2019 were reasonable and presented fairly, in accordance with the following criteria:
 - the 2019-20 Revenue Estimates of the Province were prepared on a basis consistent with the accounting policies used by Government in its consolidated financial statements which are prepared in accordance with Canadian public sector accounting standards; and
 - the assumptions underlying the 2019-20 Revenue Estimates reflected a reasonable set of economic conditions and Government's planned courses of action for fiscal year 2019-20.



Significant control weaknesses identified at the Department of Service Nova Scotia and Internal Services, the Department of Lands and Forestry, and government organizations

- 1.11 We identified significant weaknesses in internal controls during our audit of the Province's financial statements at government departments and organizations. Although these significant control weaknesses did not materially misstate the Province's or the organizations' financial statements, these observations should be addressed in a timely manner to improve the financial management control environment.
- 1.12 A significant weakness in internal controls is a weakness or combination of weaknesses that are important enough to be reported to an organization's audit committee or those charged with governance. The presence of significant control weaknesses does not necessarily mean that an organization's financial statements are not fairly stated.



Departmental purchases occur without appropriate pre-approval and review

- 1.13 During our audit of the Province's 2018-19 financial statements, we identified significant weaknesses in how the Province purchases goods and services. The Department of Service Nova Scotia and Internal Services (SNS-IS) oversees all departmental purchases and is therefore required to ensure that appropriate financial controls are in place over these activities. A well-designed purchasing process should ensure:
 - appropriate pre-approvals are obtained before making purchases,
 - applicable procurement processes are followed (i.e., obtaining quotes, issuing requests for proposals, etc.), and
 - receipt of goods and services and invoice totals are confirmed before payment is made.
- 1.14 As a result of its weaknesses in internal controls as detailed in the table below, SNS-IS may not be able to prevent and detect unauthorized or fraudulent payments and ensure departmental purchases achieve value-for-money.

Department of Service Nova Scotia and Internal Services				
Purchases of Goods and Services Significant Control Weakness	Impact			
 SNS-IS does not have a set of complete and adequate policies and procedures Signing authority is not adequately confirmed during the validation of invoices There is no pre-approval process for goods and services purchased under \$5,000, and in most instances, the related purchase order was created after the invoice was received in order to facilitate payment Controls are ineffective in identifying the splitting of purchases in order to circumvent approval thresholds Purchase orders are created without adequate validation of alternative procurement forms, in the absence of the required quotes based on value, and using expired ministerial approvals Departments are not required to document the receipt of goods or services 	The Province is unable to adequately ensure that departmental purchases are authorized, appropriate, and achieve value-for-money at dollar amounts to satisfy managements' objectives. This did not impact the material fairness of the Province's Consolidated Financial Statements.			



Department of Service Nova Scotia and Internal Services			
Purchases of Goods and Services Impact			
Significant Control Weakness			

Management's Response (unaudited)

SNS-IS Procurement Services and Financial Services Delivery has established a steering committee with terms of reference and an ongoing workplan that reflects the OAG recommendations. This steering committee will ensure that internal controls, process, procedures, policy, and cross over points between the two groups are addressed.

The Steering Committee has prioritized five items for immediate attention:

- 1. Creation of Standard Operating Procedures (SOPs) and policies that address the need for internal control and mitigate associated risk;
- 2. Creation of a Purchase Order Policy;
- 3. Creation of a Compliance Framework and Program;
- 4. Create and maintain ongoing signing authority matrices;
- 5. Review all existing policies to reflect the development of the new SOPs and procedures and ensure they reflect the proper internal controls and mitigate risk.

The Steering Committee has committed to develop a plan to address the five priorities by December 2019 with an identified implementation schedule. Once the plan has been developed, it will be shared with the Office of the Auditor General to get feedback on whether it addresses the recommendations before the creation and implementation phase starts. Procurement has identified a projected timeline of Fall-Winter 2019-2020 for the Compliance Framework. This will be the type of risk that will be monitored as part of their compliance process. Until such time, Operational Accounting will complete a monthly analysis of this risk to ensure policy and procedures are followed.



Weaknesses in payments processing and access to the Province's accounting system

1.15 The Department of Service Nova Scotia and Internal Services processes payments on behalf of all government departments. We identified significant weaknesses over this process.

Department of Service Nova Scotia and Internal Services					
Payment Processing and User Access Significant Control Weakness	Impact				
The Department has not developed and implemented formal, written policies and procedures for processing vendor payments	Increased risk of errors as well as inappropriate or unauthorized transactions				
User access to the Province's accounting system (SAP) is not reviewed regularly	Increased risk of inappropriate access and use of the Province's accounting system				

Management's Response (unaudited)

Operational Accounting is committed to continued process improvements which include updating existing or creating new written procedures on operational expense and payable processing.

Operational Accounting is currently reviewing user access to the accounting system. In SAP, roles are created for specific functionality and access, where an individual may have multiple roles or multiple individual users may have access to the same role to carry out activities in the system. Changes are required to align roles to specific positions. The new roles will be Operational Accounting position-specific, and managers are currently working to define position-specific roles. Once the role is defined, a ticket is sent to IBM for role creation. The projected completion is January 2020.

Once this project is complete, plans are to evaluate decentralized program departments who use roles that fall under the approval of Operational Accounting. Department-specific roles will be based on their respective needs with the goal of standardization and supporting government's shared services initiative.



Ineffective monitoring and reporting of abandoned mine sites

1.16 When we tested the contaminated sites liability, we identified a significant control weakness relating to the Department of Lands and Forestry's financial reporting of abandoned mine sites. As a result of this weakness, our Office is now conducting a performance audit in this area with planned reporting in spring 2020.

Department of Lands and Forestry					
Financial Reporting of Abandoned Mine Sites Significant Control Weakness	Impact				
The Department of Lands and Forestry has not completed sufficient site investigations on all abandoned mine sites identified with potential areas of contamination.	The Department cannot effectively assess the Province's financial exposure relating to potential future remediation and monitoring costs associated with abandoned mine sites.				
	Without appropriate analysis, there is a risk that potential contamination is not identified or managed, resulting in unaddressed human health or ecological concerns.				

Management's Response (unaudited)

The Department is currently working with Nova Scotia Lands and the Department of Energy and Mines to develop a process to address former mine sites, including risk ranking and identifying priorities for site evaluation. The Department of Energy and Mines has assigned a Mining Engineer to Nova Scotia Lands to assist with these efforts. Four abandoned mine sites (2 gold and 2 coal) are currently identified as priorities for further testing and evaluation. The Department continues to work with Nova Scotia Lands and Energy and Mines on developing an overall strategy and will continue to ensure that as the presence and extent of contamination on specific sites are clarified through assessments, the associated financial exposure will be appropriately reported.



15 new significant control weaknesses identified across four government organizations

- 1.17 In 2018-19, most government organizations received clean opinions on their financial statements. Four organizations with clean opinions had new significant control weaknesses. Because significant control weaknesses diminish an organization's ability to effectively manage financial operations beyond external financial reporting, having 15 new significant control weaknesses in four government organizations is a serious matter.
- 1.18 The table below shows the number of new significant control weaknesses each organization had in 2018-19 and Appendix III provides details, as well as management's responses.

Number of New Significant Control Weaknesses at Government Organizations in 2018-19				
Government Organization Number of Significant Control Weaknesses				
Housing Nova Scotia	3			
Izaak Walton Killam Health Centre	6			
Nova Scotia Gaming Corporation	1			
Nova Scotia Health Authority 5				





Previously identified significant control weaknesses not fully addressed

1.19 Significant control weaknesses identified in previous years at four government organizations were not fully addressed in 2018-19. These government organizations did however make some progress toward addressing these significant control weaknesses and their auditors considered these weaknesses to no longer be significant as at March 31, 2019.

Control Weaknesses No Longer Deemed Significant in 2018-19				
Government Organization	Control Weakness			
Cape Breton-Victoria Regional Centre for Education	Weak controls over school-based funds			
Halifax-Dartmouth Bridge Commission	Lack of segregation of duties within its finance management			
Izaak Walton Killam Health Centre	Poor restrictions and monitoring of user access to its billing system			
Strait Regional Centre for Education	 Weak controls over school-based funds Lack of segregation of duties for accounting personnel 			

1.20 In addition, we noted that since 2015-16, Harbourside Commercial Park Inc. has been made aware by their auditors of a weakness relating to its capital assets. Internal control weaknesses that remain unaddressed over multiple years can diminish an organization's financial management control environment; therefore, it is important for Harbourside Commercial Park Inc. to address this control weakness.



Previously identified significant control weaknesses addressed by organizations

1.21 Last year, we reported significant control weaknesses at Halifax-Dartmouth Bridge Commission and the Izaak Walton Killam Health Centre. During the year, these organizations addressed these significant control weaknesses and they are no longer issues.

Significant Control Weaknesses Addressed in 2018-19					
Government Organization	Significant Control Weakness				
Halifax-Dartmouth Bridge Commission	Addressed lack of segregation of duties within key IT-related functions				
Izaak Walton Killam Health Centre	Addressed no reconciliation of billings relating to out-of-province patients				

Key Matters from 2019 Audits Requiring our Attention

1.22 During the year, we identified certain matters that required extra attention due to the nature of the expense or the financial significance and the degree to which management had to use professional judgement. While the matters required additional attention, we are comfortable they were appropriately



accounted for in the Province's Consolidated Financial Statements. The following are the key areas we addressed during the 2018-19 audit of the Province's Consolidated Financial Statements.

- Liability for contaminated sites (\$372 million)
- Liability for pension and retirement obligations (\$2.6 billion)
- Payout of long service awards (\$378 million)
- Estimate of tax revenues (\$5.1 billion)
- Departmental use of purchasing cards



\$87 million increase in contaminated sites liability

- 1.23 A contaminated site is a site with contaminants that exceed an environmental standard set out in legislation that may negatively impact human and ecological health. Canadian public sector accounting standards require the Province to recognize a liability for contaminated sites in its financial statements when:
 - contamination exceeds an environmental standard,
 - the Province is directly responsible or accepts responsibility to clean up the site,
 - the Province expects to incur costs to remediate the site, and
 - a reasonable estimate of the remediation costs can be made.
- 1.24 At March 31, 2019, the Province identified and monitored 127 contaminated sites. Of these 127 sites, 39 were identified as sites where environmental cleanup was likely, or already underway, and met the criteria for recognition under Canadian public sector accounting standards. As a result, a liability of \$372 million for these 39 sites was included in the 2018-19 consolidated financial statements. This liability is management's best estimate as at March 31, 2019, which reflects the future expenditures required to complete the necessary environmental remediation based on information currently available. For context, five years ago, the environmental liability recorded by the Province was \$107 million.
- 1.25 The following table shows the contaminated sites that contributed to the \$87 million increase in the Province's contaminated sites liability this year.



Contaminated Sites Liabilities						
Contaminated Site	March 31, 2019 March 31, 2018		Reason for Increase			
Boat Harbour	\$230 million	\$205 million	Estimate updated based on new consultant report			
Abandoned Mine Sites	\$48 million	-	New consultant reports estimated remediation costs at two former gold mine sites: Goldenville (\$23.5 million) Montague (\$24.5 million)			
Other	\$94 million	\$80 million	Increase primarily relates to the required cleanup of the Harriettsfield salvage site to restore soil and improve groundwater			
Total	\$372 million	\$285 million				

- 1.26 The Province also identified an additional 63 abandoned mine sites for which no liability for remediation has been recorded, either because the site has minimal risk of requiring future remediation or the extent of the contamination and possible remediation activities is unknown.
- 1.27 To ensure that the liability for contaminated sites was appropriately measured and recorded, we reviewed the Province's plans for all sites. We also reviewed assessments and work performed, along with all the information available on each site, and met with various stakeholders within Government, including the Departments of Lands and Forestry, Environment, and Energy and Mines.
- 1.28 Relevant and significant information on environmental assessments and consultant reports was appropriately incorporated into the Province's accounting for contaminated sites. However, as additional work is performed and more information becomes available, the Province may need to account for additional liabilities related to these sites. As well, the Province appropriately disclosed in the financial statements that the liability for contaminated sites is subject to measurement uncertainty and may differ significantly as the Province continues to refine its cleanup plans. We concluded that management appropriately determined the estimate of future environmental cleanup costs relating to contaminated sites based on the information currently available.
- 1.29 The Province's estimate of the liability for cleaning up Boat Harbour at March 31, 2019 is \$230 million, an increase of \$25 million over the prior year. In 2018-19, the Province increased its liability for the Boat Harbour cleanup based on a new cost estimate determined by an external consultant. The following table shows that the Boat Harbour liability increased substantially over the last 5 years:



Boat Harbour Liability from 2014-2019 (\$ millions)						
	2014	2015	2016	2017	2018	2019
Liability	\$20	\$52	\$88	\$130	\$205	\$230

- 1.30 After reviewing the consultant's new report, along with other supporting documentation, we concluded that the estimated environmental liability for Boat Harbour represented management's best estimate at that time.
- 1.31 On May 23, 2019, the federal government announced funding for the Boat Harbour Remediation Project. The maximum funding for this project will be 50 percent of total eligible costs up to \$100 million. The Province appropriately disclosed this funding announcement in its 2018-19 consolidated financial statements.



\$2.6 billion in pension and retirement obligations accounted for correctly and properly disclosed

- 1.32 The Province reported a \$2.6 billion liability relating to pension, retirement, and other employee future benefits as at March 31, 2019. Examples of other future employee benefits include allowance payments to retiring employees and health and dental costs for retired government employees.
- 1.33 The valuation of the Province's liability related to pension, retirement, and other employee future benefits is complex and requires the expertise of an actuary. These actuarial valuations include the use of assumptions based on the Government's current best estimates of costs that will be incurred in the future.
- 1.34 Our audit procedures in 2019 included:
 - obtaining an understanding of each benefit plan and the methodology for valuing liabilities,
 - confirming the competence, capability, and objectivity of the actuary performing the valuations,
 - testing the underlying source data used by the actuaries, and
 - evaluating key assumptions.
- 1.35 Based on the work performed, we concluded that pension, retirement, and other employee future benefits were fairly stated and disclosed appropriately in accordance with Canadian public sector accounting standards.





The Province paid public sector employees \$378 million in retirement allowance entitlements in 2018-19

- 1.36 To reduce the Province's future obligation to pay employees an allowance at retirement, the Government provided eligible employees within the public service the option to receive a one-time immediate payout of their retiring allowance. During 2018-19, the Province paid out \$378 million in retirement allowance entitlements to healthcare workers, regional centres for education employees, and other public sector employees.
- 1.37 The following table details the amounts paid out.

2019 Retirement Allowance Payouts			
Eligible Employees	Eligible Payout Amount		
Healthcare workers	\$168 million		
Regional centres for education employees	\$86 million		
Other public sector employees	\$124 million		
Total	\$378 million		

- 1.38 As part of our 2019 audit procedures, we performed detailed testing of the long-service retirement allowance payout amounts. Testing included recalculating eligible years of service and verifying salary levels used in the payout calculations.
- 1.39 Based on the work performed, we concluded that long-service retirement allowance payouts were accurately recorded and appropriately disclosed in accordance with Canadian public sector accounting standards.



Significant uncertainty in estimating tax revenues of \$5.1 billion

- 1.40 The largest source of revenue for the Province is tax revenues, with \$5.1 billion coming from Personal Income Tax, Corporate Income Tax, and HST. These revenues are subject to significant assumptions and judgements due to the timing differences between the Province's reporting date and when actual tax revenue figures become known, such as when taxpayers file tax returns.
- 1.41 In order to record tax revenue, management determines its best estimate using statistical models based on assumptions that reflect historical trends, economic conditions, and Government's planned courses of action. The Public Accounts provide further information on the estimation of tax revenues and uncertainty around these estimates.
- 1.42 We obtained an understanding of the systems, processes, and controls over tax revenue. We tested the underlying data used in the various tax revenue estimation models and reviewed evidence to support the key assumptions



used while considering external information. Based on our work, we were satisfied that 2018-19 tax revenues were reasonable and fairly stated.



Increased risk of inappropriate expense transactions relating to the purchasing card process

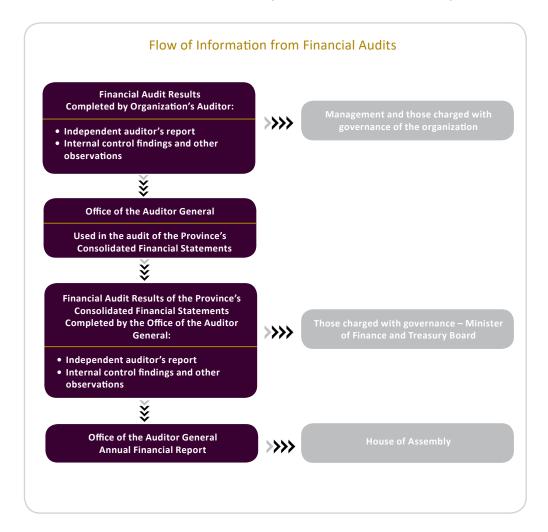
- 1.43 Purchasing cards (PCards) are government credit cards used by employees to make work-related purchases. PCard balances are paid directly by the Province without cardholders having to initially provide purchasing support (i.e., receipts and invoices). As a result, PCards present a risk for misuse by employees.
- 1.44 In response to this risk, we tested departmental PCard transactions made during fiscal 2018-19. We identified several transactions that were missing documentation as required by the Province's PCard policy. Missing documentation diminishes management's ability to effectively review and approve PCard purchases. Ineffective review and approval of PCard transactions increases the risk that inappropriate purchases are made and are not detected.
- 1.45 We concluded that the weaknesses in this area did not impact our opinion on the material fairness of the Province's 2018-19 expenditures. However, we recommended that the Province review its policies, procedures, and processes relating to the use of PCards to ensure more effective financial management and control.



Appendix I

Reporting on Financial Audits

The individual financial audit results of government organizations are reported to organizations' management and those charged with governance. Our Office also uses this information to conduct our audit of the Province's Consolidated Financial Statements and in our annual financial report to the House of Assembly.





Appendix II

Independent Auditor's Report

INDEPENDENT AUDITOR'S REPORT

To the Members of the Legislative Assembly of Nova Scotia:

Report on the Audit of the Consolidated Financial Statements

Opinion

I have audited the consolidated financial statements of the Province of Nova Scotia, which comprise the consolidated statement of financial position as at March 31, 2019, and the consolidated statement of operations and accumulated deficits, consolidated statement of changes in net debt and consolidated statement of cash flow for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Province of Nova Scotia as at March 31, 2019, and its consolidated results of operations, consolidated changes in its net debt, and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

I conducted my audit in accordance with Canadian generally accepted auditing standards. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of my report. I am independent of the Province of Nova Scotia in accordance with the ethical requirements that are relevant to my audit of the consolidated financial statements in Canada, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of Matter - Accounting for Contaminated Sites

I draw attention to Note 1 and Note 10 of the March 31, 2019 consolidated financial statements of the Province of Nova Scotia which describe the accounting policy and the nature and details of the amounts recorded in the consolidated financial statements related to contaminated sites. This note outlines how the Province complies with accounting standards for environmental costs based on the key requirements of Canadian public sector accounting standards. This means that amounts are only recorded when a liability meets recognition criteria and can be reliably measured.

In the future, as additional environmental studies are completed, it may be possible that the Province will need to account for additional liabilities related to its contaminated sites if it determines that contamination exceeds an environmental standard, a reasonable estimate of the related remediation costs can be made, and it is expected future economic benefits will be given up to remediate the sites.

The March 31, 2019 consolidated financial statements of the Province of Nova Scotia fairly present the contaminated sites liability in accordance with Canadian public sector accounting standards.

My opinion is not modified in respect of this matter.

Other Information

The Government of Nova Scotia is responsible for the other information. The other information comprises the information in Volume 1 of the Public Accounts of Nova Scotia (but does not include the consolidated financial statements and my auditor's report thereon), which I obtained prior to the date of this auditor's report, and the Form 18-K Securities and Exchange Commission filing, which is expected to be made available to us after that date.



My opinion on the consolidated financial statements does not cover the other information and I do not and will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated financial statements, my responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed on the other information that I obtained prior to the date of this auditor's report, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

When I read the Form 18-K Securities and Exchange Commission filing, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Province of Nova Scotia's ability to continue as a going concern, disclosing, as applicable, matters related to the going concern assumption. The going concern basis of accounting has been used in the preparation of the consolidated financial statements, as the Province of Nova Scotia continues to operate as a going concern.

Those charged with governance are responsible for overseeing the Province of Nova Scotia's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

My objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the consolidated financial statements,
 whether due to fraud or error, design and perform audit procedures responsive to those risks, and
 obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of
 not detecting a material misstatement resulting from fraud is higher than for one resulting from error,
 as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of
 internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures
 that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Province of Nova Scotia's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.



- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Province's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Province of Nova Scotia to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Province of Nova Scotia to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision, and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

Michael A. Pickup, FCPA, FCA Auditor General of Nova Scotia

Halifax, Nova Scotia July 18, 2019



Appendix III

Summary of Significant Control Weaknesses

Housing Nova Scotia							
Significant Control Weakness	Potential Impact						
1. User accounts are not locked after a reasonable number of unauthorized access attempts and user passwords do not expire until after 120 days have	Unauthorized access to information and ris of financial errors						
elapsed	Difficult to detect compromised passwords due to the length of time before a password expires						
2. Individuals responsible for program changes use shared accounts to modify data	Unapproved data changes may be made or fraudulent activity could go undetected						
3. Individuals responsible for application changes have access to both test and production environments	Unapproved data changes may be made or fraudulent activity could go undetected						

Management's response (unaudited)

Finding 1: Security controls on user accounts for the provincial network are under the responsibility of SNS-IS and as a result, Housing Nova Scotia does not have the authority to implement measures to address user account or password identified deficiencies. Housing Nova Scotia will raise these findings with SNS-IS to assist in ensuring the identified deficiencies are addressed.

Findings 2 & 3: Noted individuals are staff of SNS-IS and as a result, Housing Nova Scotia does not have the authority to implement measures to address the shared account and separation of duties deficiencies. Housing Nova Scotia will raise these findings with SNS-IS to assist in ensuring the identified deficiencies are addressed.

Izaak Walton Killam Health Centre							
Significant Control Weakness	Potential Impact						
1. Lack of segregation of duties in the preparation, review, and posting of journal entries	Inappropriate or unauthorized journa entries could be recorded						
2. Lack of restrictions and monitoring of user access to billing system	Unauthorized access to billing system couresult in inappropriate transactions						
3. Lack of segregation of duties in the procurement department	Unauthorized purchases could be made						
4. Lack of monitoring of capital assets	Inability to effectively track tangible capital assets and identify potentially misappropriated assets						
5. Capital assets are not recorded on the date of acquisition; thereby, delaying amortization expense	Overstatement of capital assets and understatement of annual expenditures						
6. Estimated useful lives and amortization methods are not regularly reviewed by management	Misstatement of capital assets						

Management's response (unaudited)

The IWK continues to address the identified control weaknesses in this report. Effective April 1, 2019, management implemented a journal entry policy which addresses deficiencies surrounding segregation of duties with journal entries. Access to the IWK's billing system is limited to less than fifteen people and a quarterly access review process has been implemented. In addition, a review of



Izaak Walton Killam Health Centre (continued)

individual specific transaction access is in progress. Procurement segregation of duties weaknesses have been addressed with the implementation of added controls and further controls measures have been developed and are in varying stages of implementation. Management has begun work to address the identified capital asset control deficiencies. Controls around capital acquisition dates, useful lives and amortization methods will be completed during fiscal 2019-20, however due to the varying types and volumes of assets, along with other complexities, the implementation of a fully functioning asset tracking system will extend into fiscal 2020-21.

Nova Scotia Gaming Corporation							
Significant Control Weakness	Potential Impact						
No established process to ensure the conclusions reached by external advisors on complex accounting issues are appropriately implemented in financial reporting	particularly around complex accounting						

Management's response (unaudited)

Management acknowledges that an issue was identified through the audit and has taken steps to correct the consolidated accounts prior to the completion and release of the March 31, 2019 consolidated financial statements.

Nova Scotia Health Authority							
Significant Control Weakness	Potential Impact						
1. Internal control environment is incomplete	Increased risk of ineffective financial reporting due to a lack of implementation, monitoring, and reporting of internal controls in key areas						
2. Managers do not consistently review and approve timesheets	Increased risk due to fraud or error in payroll expenses						
3. Lack of review of capital asset additions	Inappropriate recording of capital assets						
4. Construction in progress accounts are not adequately reviewed to determine which projects are complete	Overstated construction in progress accounts could understate annual expenditures						
5. Lack of monitoring of capital assets	Inability to effectively track tangible capital assets and identify potentially misappropriated assets						

Management's response (unaudited)

Strong internal controls are of the utmost importance to NSHA which is why several comprehensive strategies have been implemented or are underway to strengthen and support our financial control environment. NSHA prepares and reviews exception reports for timesheets to ensure time coded is being monitored centrally as well. There is an NSHA team in place dedicated to internal control design, management and oversight, as well as an Internal Audit team which reports directly to the Board of Directors. A comprehensive fraud risk assessment on payroll has been completed; and many other control strategies are in place or in progress. The areas highlighted by the OAG are being worked on, including mitigation plans developed and the hiring of an independent external review to ensure the NSHA is focusing on the key risk issues and priority areas. This review is in progress, and will continue to guide our efforts.



Chapter 2

Nova Scotia's Finances from 2019 Public Accounts

Key Messages

- This chapter provides highlights to encourage public discussion on the Province's financial results. This is not a commentary on government policy or decisions. More analysis is provided by Government in the Public Accounts of Nova Scotia.
- Over the past 10 years, financial indicators show worsening trends; however, over the past 5 years, many indicators show improvement such as a decreasing net debt to GDP and recent surpluses
- The Province's expenses increased by 28% from 10 years ago to deliver services to roughly the same population (3% increase). These numbers can generate valuable public discussion on Nova Scotia's future finances.

Financial Condition of the Province of Nova Scotia

One picture of a government's financial condition is the use of ratios and analysis to generate discussion on sustainability, flexibility, and vulnerability. These indicators are suggested by CPA Canada's Public Sector Accounting Board.

Sustainability indicators show the Province's ability to maintain existing services and financial requirements without needing to increase revenues or debt

10-year trend	Past 5 years
cumulative net deficit of \$575 million	 cumulative net surplus of \$340 million
 net debt increased by \$2.7 billion (22%) 	 net debt increased by \$200 million (1%)
 net debt to GDP decreased by 0.6% points 	 net debt to GDP decreased by 4.1% points
 net long-term debt increased by \$3.3 billion (32%) 	 net long-term debt increased by \$529 million (4%)

Overall:

- The past decade, taken as a whole, shows a trend of worsening sustainability
- Much of this worsening sustainability occurred in the first 5 years of the past decade
- · Over the past 5 years, indicators such as the cumulative net surplus and net debt to GDP show improvement
- Tangible capital asset acquisitions increased the net debt by \$6.1 billion in the past decade

Flexibility indicators show the Province's ability to increase revenues or debt borrowings within its economy

10-year trend	Past 5 years
 interest on long-term debt averaged \$742 million 	 interest on long-term debt had minor fluctuations
annually	averaging \$741 million annually
interest on long-term debt per capita averaged \$786 per	 interest on long-term debt per capita averaged \$784
Nova Scotian	per Nova Scotian

Overall:

- Annual interest paid on long-term debt was relatively constant over the past 10 years
- The Province paid \$7.4 billion in interest during the last decade
- The average long-term debt per capita per Nova Scotian shows little change

Vulnerability indicators show the Province's reliance on revenues outside its control

10-year trend Past 5 years

 Federal government transfers went from 32.6% to 31.8% of total revenues Federal government transfers went from 33.7% to 31.8% of total revenues

Overall:

Nearly \$1 of every \$3 of the Province's revenue comes from the federal government



Selected Financial Highlights

Expenses	Highlights				
Overall	 Annual expenses up \$2.5 billion (28%) from 10 years ago to provide services to a population that increased by 3% in the past decade Government spending \$12,245 per Nova Scotian in 2019 (2009 - \$9,834); up 25% in the past decade Executive Council approved an additional \$347 million in expenses above the 2019 budgeted amount; \$98 million related to cleanup of contaminated sites 				
Health and Wellness	 Increased by \$1.2 billion (36%) over the past 10 years 40% of the Province's 2019 expenses (2009 - 38%) \$4,891 per Nova Scotian in 2019 (2009 - \$3,691); up 33% in past decade 				
Education and Early Childhood Development	 Increased by \$328 million (23%) over the past 10 years 15% of the Province's 2019 expenses (2009 - 16%) \$1,832 per Nova Scotian in 2019 (2009 - \$1,527); up 20% in past decade 				

Revenues	Highlights
Overall	 Annual revenues up \$2.6 billion (28%) from 10 years ago
	 Revenue growth mainly from increased tax revenues
	 Tax revenues up \$1.7 billion (43%) from 10 years ago
	 Personal tax filers pay on average 30% more personal income tax
	than 10 years ago partially as a result of an increase in taxable
	income
	 Federal transfers up \$813 million (27%) from 10 years ago

Questions Nova Scotians may want to ask:

- 1. What do the financial indicators mean for the Province going forward in terms of revenue and expense plans?
- 2. How will Nova Scotia's aging population impact future revenues, spending on healthcare, and other costs and what is the Government doing about it?
- 3. How do healthcare costs of \$4,891 per Nova Scotian compare to other provinces and what does this mean for the future?
- 4. Why is interest on long-term debt over \$30 million more in 2018-19 than in 2017-18?
- 5. Is the Province's practice of using new debt to repay old debt sustainable?
- 6. What are the plans on handling the Province's debt?
- 7. What does a decreasing net debt to GDP ratio mean for me?
- 8. Will more money be needed to clean up other abandoned mine sites and how will this impact other services?



Nova Scotia's Finances from 2019 Public Accounts

Purpose

- 2.1 The Province's finances are an area that all Nova Scotians likely have an interest in. The purpose of this chapter is to inform Nova Scotians on some aspects of the Province's finances and to promote discussion.
- 2.2 We look at numbers from the perspective of sustainability, flexibility, and vulnerability and provide information on the current level of revenues, expenses, and population changes against levels from 10 years ago to provide insight into the Province's financial condition. We are not commenting on the financial decisions made by Government. The information presented below is only part of the story and does not consider such factors as policy decisions, actual programs and services, inflation, performance of the provincial economy, and other elements that may impact revenues and expenses. Additional information, including economic highlights, is presented in the Financial Statement Discussion and Analysis section in Volume 1 of the 2019 Public Accounts of Nova Scotia where there are 55 pages of detailed analysis and explanations.

Financial Indicators – What they show



Selected indicators have worsened over the past 10 years, yet many of these indicators show improvement in the past 5 years

- 2.3 There are various indicators that can be used to assess the Province's financial condition. The indicators included in this chapter are among those recommended for reporting by the Public Sector Accounting Board's Statement of Recommended Practice 4: Indicators of Financial Condition. The indicators reported are meant to provide additional information on the Province's financial condition but are not intended as commentary on the financial impact of government policies or fiscal management.
- 2.4 The Statement of Recommended Practice recommends that, at a minimum, indicators related to sustainability, flexibility, and vulnerability be considered. We have included these types of indicators, along with other information we feel is useful in demonstrating the Province's financial condition. These are tools that can assist users of the Province's consolidated financial statements to interpret its financial information.
- 2.5 The financial indicators presented in this chapter provide an overview of the Province's financial performance for the 10-year period ending March 31, 2019. The following table presents overall financial indicators to give a



picture of the Province's financial condition. The table shows the condition has worsened over the past 10 years, but over the past 5 years, many indicators show improvement.

Financial Highlights							
Indicator 10-Year Trend F							
Sustainability							
Annual surplus or deficit	Fluctuating	Improving					
Net debt	Increasing	Constant					
Net debt to GDP	Fluctuating	Decreasing					
Net debt per capita	Increasing	Slightly decreasing					
Net long-term debt	Increasing	Slightly increasing					
Net long-term debt per capita	Increasing	Slightly decreasing					
Flexibility							
Interest on long-term debt	Fluctuating	Fluctuating					
Interest on long-term debt per capita	Fluctuating	Fluctuating					
Vulnerability							
Federal government transfers as a percentage of total revenues	Slightly decreasing	Constant					

Sustainability

- 2.6 Sustainability measures the ability of a government to maintain its existing programs and services, including maintaining its financial obligations to creditors, without having to increase debt or tax rates. Sustainability indicators provide insight into how a government balances its commitments and debts.
- 2.7 The financial indicators related to government sustainability demonstrate that the overall financial condition of the Province has worsened over the past 10 years. However, over the past five years, many sustainability indicators show improvement. Worsening sustainability is primarily caused by a government taking on more debt.

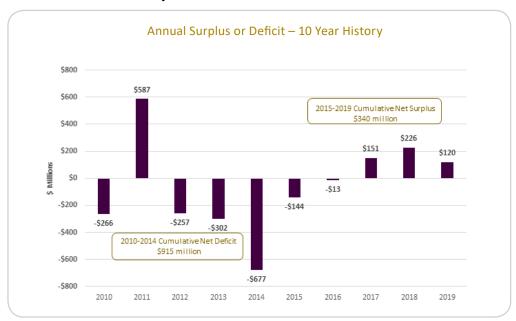


While the last 5 years show a cumulative net surplus of \$340 million, over the last decade there is a cumulative net deficit of \$575 million

- 2.8 The annual surplus or deficit indicates the extent to which revenues are more or less than yearly expenses. A surplus occurs when revenues exceed expenses. The Province reported a surplus of \$120 million in 2019. Changes in revenues and expenses are discussed in detail in Volume 1 of the Public Accounts.
- 2.9 Although the Province realized a \$120 million surplus in 2019, the cumulative annual surpluses and deficits over the past 10 years is an overall deficit of



\$575 million. This 10-year cumulative net deficit may impact sustainability, as it shows that the Province's revenues have not kept pace with its expenses. Over the past five years, the cumulative result is a net \$340 million surplus, but this is offset by a \$915 million deficit in the first half of the last decade.

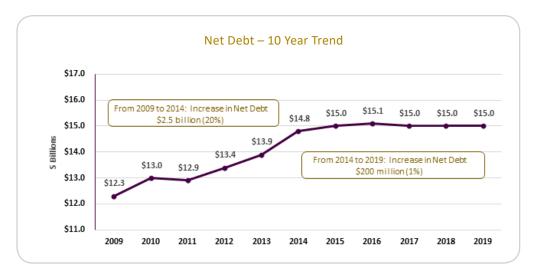




Since 2009 the Province's net debt increased by \$2.7 billion

- 2.10 Net debt is used to define the difference between financial assets and liabilities and informs the reader as to whether there are enough financial assets to cover the liabilities. Further information about net debt is provided on pages 13 and 14 of the Financial Statement Discussion and Analysis section of Volume 1 of the Public Accounts.
- 2.11 Net debt remained stable at \$15.0 billion in 2019 and has been relatively stable over the last five years with an overall increase of \$200 million. The following chart shows that over the past 10 years the Province's net debt increased by \$2.7 billion (22%).





2.12 Over the past 10 years, acquisitions of \$6.1 billion for highways, buildings, vehicles, and other assets, were the largest contributor to the Province's increase in net debt. This is important to consider because it shows that net debt increased over the past decade as the Province continued to invest in infrastructure. The following table shows the annual level of tangible capital acquisitions over the past 10 years.

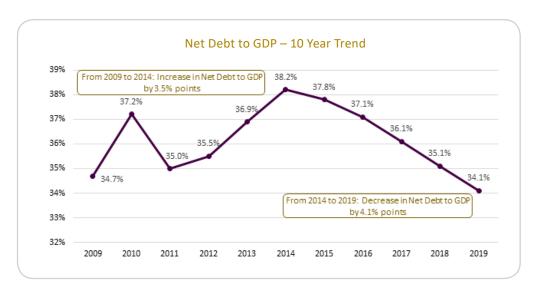
Tangible Capital Asset Acquisitions from 2010 to 2019 (\$ millions)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Tangible Capital Acquisitions	\$775	\$703	\$610	\$691	\$546	\$542	\$466	\$459	\$671	\$588	\$6,051



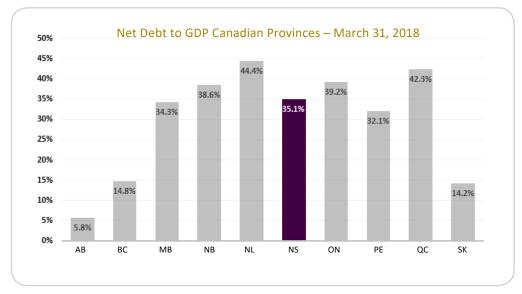
In 2019 net debt to GDP reached its lowest point since 2009

- 2.13 Gross domestic product (GDP) is the total value of all goods and services produced within the Province in a given year and is one of the primary measures used when evaluating the financial condition of a province or country.
- 2.14 Net debt to GDP is used to assess the Province's ability to pay down its financial obligations. A low ratio indicates a level of economic output that supports debt repayment. The higher the ratio, the more difficult it may be for the Province to pay its debt.
- 2.15 The following chart shows that while net debt as a percentage of GDP has steadily decreased in the last 5 years, over the last 10 years, net debt to GDP decreased by 0.6% to 34.1%.





- 2.16 For comparison, the following table shows the net debt to GDP by province at March 31, 2018 and provides context to where Nova Scotia stands in comparison to other Canadian provinces.
- 2.17 Nova Scotia's net debt to GDP was 35.1% at March 31, 2018. As the table below shows, three provinces had net debt to GDP that was significantly less than Nova Scotia (net debt to GDP less than 15%). There were also three provinces with net debt to GDP that was significantly higher than Nova Scotia (net dept to GDP greater than 39%). The remaining four provinces, including Nova Scotia, had net dept to GDP ratios ranging between 32.1% and 38.6%.

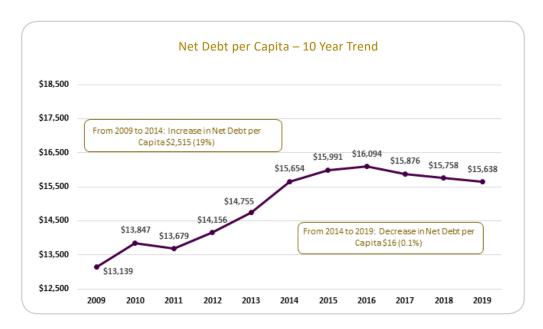


Source: Net debt derived from each province's consolidated financial statements at March 31, 2018. GDP data from Statistics Canada.

Note: We have not included the three territories in this comparison.

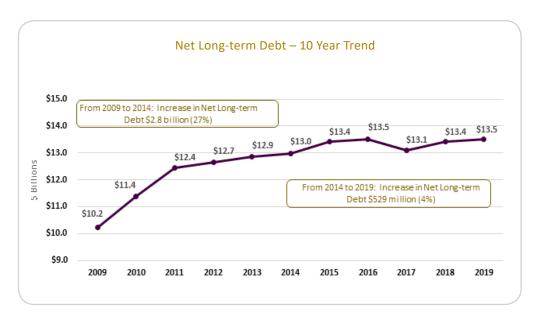


2.18 Net debt per capita shows the amount of net debt attributable to each person living in Nova Scotia. As the following chart shows, as at March 31, 2019, the Province of Nova Scotia owed \$15,638 for each Nova Scotian from past financial decisions. Despite a marginal reduction in net debt per capita in the current year, since 2009, net debt increased \$2,499 per capita, which is 19 percent over the past decade.



- 2.19 Unmatured debt is the total debt the Province owes to external parties and consists primarily of debentures and long-term loans. Net long-term debt is the Province's unmatured debt less the amount that is set aside to fully fund specific debt when it becomes due. Schedule 4 of Volume 1 of the Public Accounts contains more details on unmatured debt.
- 2.20 In prior years, we commented that the increasing trend in net long-term debt is a significant indicator of fiscal sustainability because the costs of servicing this debt takes priority over program expenses and reduces the ability of the Government to expand services or reduce taxes.
- 2.21 Net long-term debt increased by \$100 million over the prior year and by \$3.3 billion (32%) over the past 10 years. 85% of this \$3.3 billion increase in net long-term debt occurred between 2009 and 2014.



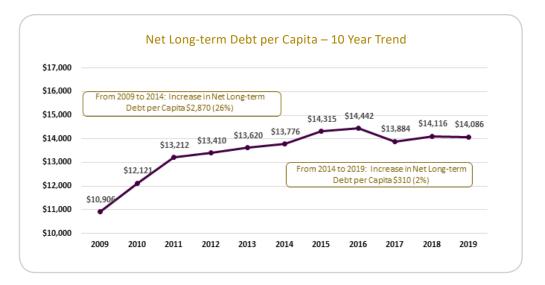


2.22 Although the increasing trend in net long-term debt is a significant indicator of fiscal sustainability, it is important to understand what the Province uses its new debt for. The following table shows that over the past five years, the Province primarily used new borrowings to refinance old debt maturing during the year.

Government Borrowing Requirements and Usage from 2015 to 2019 (\$ millions)									
Public Accounts Statement of Cash Flow	2015	2016	2017	2018	2019				
New debt issued in the year	\$1,187	\$1,040	\$675	\$930	\$1,305				
Refinancing and repayment of old debt	\$-605	\$-1,044	\$-1,010	\$-475	\$-1,280				
Sinking funds withdrawals (installments)	\$-41	\$178	\$-26	\$-26	\$174				
Amortization of foreign exchange gains and other items	\$-19	\$-27	\$-21	\$-18	\$-12				
Remaining new debt available to finance capital acquisitions, investment activities, and operations	\$522	\$147	\$-382	\$411	\$187				

2.23 Net long-term debt per capita measures the burden of the Province's debt owing to third parties attributable to each Nova Scotian. Net long-term debt per capita decreased in 2019 by \$30 to \$14,086 per person. Over the past 10 years, net long-term debt per capita increased by \$3,180 (29%) per Nova Scotian with 90% of this increase occurring in the 2009 to 2014 period.

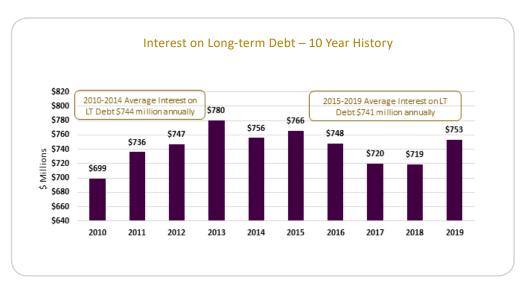




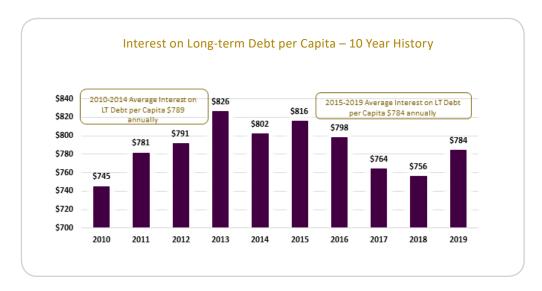
Flexibility

- 2.24 Flexibility is the degree to which a government can change its debt burden or raise taxes within its economy to meet its existing financial obligations. Flexibility provides insights into how a government manages its finances. Increasing debt obligations and interest costs reduce a government's future flexibility and ability to respond to changing circumstances.
- 2.25 Interest on long-term debt assists in assessing flexibility, as it is the cost associated with servicing past borrowing decisions. These costs represent a required cost once debt is issued. Failure to pay interest impacts the ability to raise future debt and increases costs of borrowing. Interest on long-term debt represents funds which cannot be used for general operations, such as providing programs and services to Nova Scotians. The Province paid over \$7.4 billion in interest on long-term debt in the past 10 years, an average of \$742 million annually.
- 2.26 Although the chart below shows fluctuations in the annual interest on long-term debt over the past 10 years, the average amount of interest paid in the past 5 years is about the same as the average paid between 2009 and 2014. Overall, the average annual interest on long-term debt over the past 10 years was \$742 million.





2.27 Interest on long-term debt per capita represents the interest the Province pays for every Nova Scotian each year on unmatured debt. Although the chart below shows fluctuations in the interest on long-term debt per capita over the past 10 years, the average amount of interest paid in the past 5 years is about the same as the average paid between 2009 and 2014. Overall, the average annual interest on long-term debt over the past 10 years was \$786 per Nova Scotian.

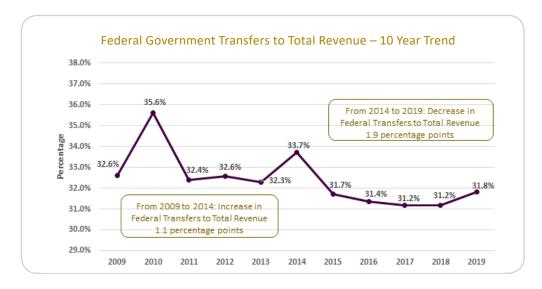


Vulnerability

2.28 Vulnerability indicators measure the amount a government is dependent on sources of revenue outside its control and its exposure to risks which might affect a government's ability to meet its commitments. The more a government relies on revenue from other sources, the more dependent it is on the fiscal decisions of others.



2.29 As illustrated below, Nova Scotia continues to rely on federal government transfers. Overall reliance on federal government funding remains relatively consistent over the past 10 years with nearly \$1 in every \$3 of the Province's revenue coming from the federal government.



Financial Highlights

2.30 The financial trends and comparisons presented below do not consider the impact that factors such as policy decisions, actual programs and services, inflation, and other elements have had on revenues and expenses.



Province's expenses up \$2.5 billion (28%) from 10 years ago

2.31 The Province's annual expenses increased by 28 percent over the past 10 years from \$9.2 billion in 2009 to \$11.8 billion in 2019. \$7.6 billion of the Province's \$11.8 billion annual expenditures is incurred by the Community Services, Education and Early Childhood Development, and Health and Wellness sectors. Health-related expenses account for 40 percent (2009 - 38 percent) of total provincial expenditures and education-related expenses account for 15 percent (2009 - 16 percent).

Change in Total Expenses from 2009 to 2019							
Sector 2009 2019 Change Change (\$ millions) (\$ millions) (%)							
Community Services	\$864	\$1,125	\$261	30%			
Education and Early Childhood Development	\$1,431	\$1,759	\$328	23%			
Health and Wellness	\$3,460	\$4,695	\$1,235	36%			
Remaining departments and government organizations	\$2,371	\$3,007	\$636	27%			
Other non-departmental costs	\$1,093	\$1,169	\$76	7%			
Total	\$9,219	\$11,755	\$2,536	28%			





Increasing financial challenges as Nova Scotia's population ages

2.32 With demographic trends pointing to a growing number of individuals over the age of 65, the Province will likely face financial and other challenges. This demographic makes up 21 percent of the Province's population (Appendix I, Nova Scotia's Population). By the year 2030, the Province expects that more than 1 in 4 Nova Scotians will be aged 65 and over. Also, tax filers over the age of 65 often pay less personal income tax due to lower income after retirement and the availability of additional tax credits. This information can generate a worthwhile discussion of the challenges facing Nova Scotia in the future.



Expenses per Nova Scotian up 25 percent over the past 10-year period

2.33 The Province's expenses per Nova Scotian increased by \$2,411 (25%) from 2009 and now total \$12,245 per capita. This per capita change is driven primarily by spending increases. See Appendix I for Nova Scotia population changes since 2009.

/						
Expenses per Capita from 2009 to 2019						
2009 (\$) 2019 (\$) Change (\$) Change (9)						
Sector						
Community Services	\$922	\$1,172	\$250	27%		
Education and Early Childhood	\$1,527	\$1,832	\$305	20%		
Development						
Health and Wellness	\$3,691	\$4,891	\$1,200	33%		
Other	\$3,694	\$4,350	\$656	18%		
Total Expenses	\$9,834	\$12,245	\$2,411	25%		



Province's revenues up \$2.6 billion (28%) from 10 years ago

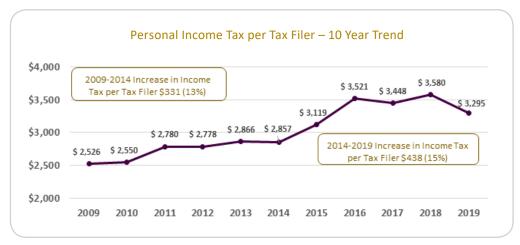
2.34 The table below shows revenue by type for 2009 and 2019. The Province's revenues increased by \$2.6 billion (28%) from 2009 with tax revenues accounting for \$1.7 billion of the increase.

Change in Total Revenue from 2009 to 2019							
Revenue Type 2009 2019 Change (\$ millions) (\$ millions) (\$ millions)							
Personal Income Tax	\$1,825	\$2,550	\$725	40%			
Corporate Income Tax	\$421	\$700	\$279	66%			
HST and Other Taxes	\$1,764	\$2,501	\$737	42%			
Other Revenue	\$2,271	\$2,347	\$76	3%			
Federal Transfers	\$2,964	\$3,777	\$813	27%			
Total Revenues	\$9,245	\$11,875	\$2,630	28%			



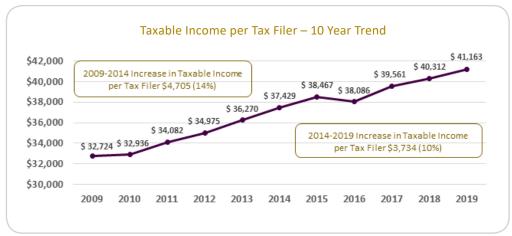
Personal tax filers pay on average 30% more personal income tax than 10 years ago

2.35 Personal income tax revenue per tax filer equals the total personal income tax collected over the total number of tax filers. During 2019, the Province earned on average \$3,295 from each tax filer, which is a 30 percent increase over 2009.



Source: Tax filer data provided by the Department of Finance and Treasury Board

2.36 Increases in the number of tax filers and taxable incomes over the past 10 years, as well as the progressive nature of our income tax system assists in explaining the growth in personal income tax revenue over the same period. The graph below shows the increase since 2009 in the amount of average personal taxable income per tax filer. During 2019, the average taxable income per tax filer was \$41,163, which is a 26 percent increase from 2009.



Source: Tax filer data provided by the Department of Finance and Treasury Board



Other Observations



Executive Council approved \$347 million in additional appropriations with \$98 million related to the cleanup of contaminated sites

- 2.37 Public sector entities are held to a high standard of accountability, as they spend funds raised from taxpayers to provide public services. As a result, the public expects the use of those funds to be transparent.
- 2.38 An Appropriations Act of Nova Scotia is passed each year and details what the Province is authorized to spend during the fiscal year. When an original budget appropriation is determined to be insufficient, the Finance Act of Nova Scotia requires that an additional appropriation be obtained. While the original budget is presented to and challenged by members of the Legislature, additional appropriations only require Executive Council approval. Requesting additional appropriations is a normal part of government operations.
- 2.39 Executive Council approved additional appropriations totaling \$347 million for the year ended March 31, 2019. This includes \$98 million requested by the Departments of Transportation and Infrastructure Renewal and Lands and Forestry for the cleanup of contaminated sites. The table below details \$271 million of the \$347 million in additional appropriations and the primary reasons why the departments required additional funding. The remaining \$76 million in appropriations relate to various other departments who have additional appropriations not exceeding \$10 million. Further details are found in the Financial Statement Discussion and Analysis section of Volume 1 of the 2019 Public Accounts.

Departments Requiring Additional Appropriations					
Department/Appropriation Area	Additional Approved Funding	Why additional appropriation needed			
Health and Wellness	\$105 million	 \$55 million in additional funding to the Health Authorities for various healthcare services \$9 million for all other health programs \$58 million requested and not used Offset by savings of \$17 million due to changes in timelines for major capital projects 			
Transportation and Infrastructure Renewal	\$74 million	 \$35 million for Boat Harbour remediation* \$15 million for Harrietsfield remediation* \$13 million for the Yarmouth ferry \$18 million for snow and ice removal, new cargo facilities at the Halifax Stanfield International Airport, and other work Offset by savings of \$7 million in amortization decreases and other activities 			



Departments Requiring Additional Appropriations				
Departments Department/Appropriation Area	Additional Approved Funding	Why additional appropriation needed		
Lands and Forestry	\$50 million	 \$48 million for the remediation of abandoned mine sites* \$2 million for the implementation of Forestry Review initiatives and other projects 		
Agriculture	\$16 million	 \$10 million for implementation of the provincial Frost Loss Program \$6 million requested and not used 		
Internal Services	\$15 million	\$15 million primarily for modernization and sustainment of SAP and health information IT services		
Energy and Mines	\$11 million	\$14 million to support Homewarming and Affordable Renters programs Offset by \$3 million in reduced recoverable expenses related to the Low Carbon Economy Fund		
Total	\$271 million			

^{*\$98} million in total for contaminated sites



Appendix I

Nova Scotia's Population

Nova Scotia's population increased 3% from 2009 and age demographics shifted.

Change in Population from 2009 to 2019 (000's)							
Population	2009	2019 Forecast	Change in Population from 2009	% Change in Population from 2009			
0 to 17 years	176,561	166,000	-10,561	-6%			
18 to 64 years	615,029	597,258	-17,771	-3%			
65+	146,618	201,699	55,081	38%			
Total	938,208	964,957	26,749	3%			

Shift in Age Demographic from 2009 to 2019 (%)					
Population	% of 2009 Total	% of 2019 Total	Shift in Age Demographic		
0 to 17 years	19%	17%	-2%		
18 to 64 years	65%	62%	-3%		
65+	16%	21%	5%		
Total	100%	100%			

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Chapter 3 Cybersecurity, Purchasing Cards, and Follow-up on Prior Year Observations

Key Messages

- The Province continues to develop its cybersecurity risk management program
- Government organizations are not assessing the risks related to the use of purchasing cards
- Government organizations have taken some actions, yet are not managing fraud risks quickly enough
- The Province, the NSTU, and the Trustee are looking for ways to improve the long-term financial health of the Nova Scotia Teachers' Pension Plan
- · Government has not yet provided promised guidance on internal meetings and employee social events costs

Details Around Key Messages

The Province's cybersecurity risk management program continues to develop			
Observation	Example		
In 2016, the Province initiated a cybersecurity program	 Created a Cyber Security and Risk Management Division Hired a Chief Information Security Officer in 2016 Adopted recognized frameworks to address cybersecurity risks Shared Services regulations are not yet finalized 		
The Department of Service Nova Scotia and Internal Services may not be managing all of its cybersecurity risks	 The Cyber Security Risk Management Division manages its own risks, but the government-wide risk register is still in development 		
Survey results of 10 government organizations show a varied understanding of cybersecurity responsibilities	 2 organizations noted they are not responsible for cybersecurity, yet they do in fact have responsibilities 3 organizations noted they do not have a cybersecurity governance structure 4 organizations noted they do not have a cybersecurity risk management program, which is concerning 		

Half of surveyed government organizations have not assessed purchasing card risks		
Observation	Example	
1 of 8 surveyed organizations using purchasing cards has not implemented a purchasing card policy	Nova Scotia Municipal Finance Corporation	
4 of 8 government organizations have not assessed the risks of using purchasing cards	 Halifax Regional Centre for Education Nova Scotia Farm Loan Board Nova Scotia Liquor Corporation Nova Scotia Municipal Finance Corporation 	



Government departments and organizations are not managing fraud risks quickly enough			
Observation	Example		
Overall, too many fraud risk assessments are not completed, leaving uncertainty over fraud risk	 47% of government departments have not completed fraud risk assessments Department of Service Nova Scotia and Internal Services has significant control weaknesses and has not completed a fraud risk assessment 43% of government organizations have not completed fraud risk assessments 		
Slow progress in implementing fraud risk management programs in the education sector	 Six educational organizations have no fraud policy and have not completed fraud risk assessments The Department of Education and Early Childhood Development has not completed a fraud risk assessment 		
Mandatory fraud training is not being taken as required	 Less than 35% of staff completed mandatory fraud training at 3 government departments and 4 public service units 		
Slow progress in evaluating the use of a fraud tip hotline, the most effective method of discovering fraud	25% of government organizations still have not evaluated the need for a fraud tip hotline		

Questions Nova Scotians may want to ask:

- 1. What is being done to ensure cybersecurity risks throughout the Province's IT environment are fully managed?
- 2. Why are there organizations that do not understand their cybersecurity responsibilities and what will be done about this?
- 3. What is the plan for finalizing the Shared Services regulations to list the government organizations that are to use the Province's IT services?
- 4. Why is it taking so long for a government that collects nearly \$12 billion a year to have its fraud risks fully assessed and employees complete mandatory fraud training?
- 5. Why are fraud management programs nearly non-existent in regional centres for education which have had internal control weaknesses present for many years?
- 6. When will the Province's fraud reporting service/ hotline be available?
- 7. How does the Government create awareness of its fraud management program with its employees and the public?
- 8. How are government organizations ensuring adequate controls are in place relating to purchasing card spending if risk assessments are not completed?
- 9. Will the findings of the consultant's report on the teachers' pension plan be used to improve the financial health of the plan?



Cybersecurity, Purchasing Cards, and Follow-up on Prior Year Observations

Purpose

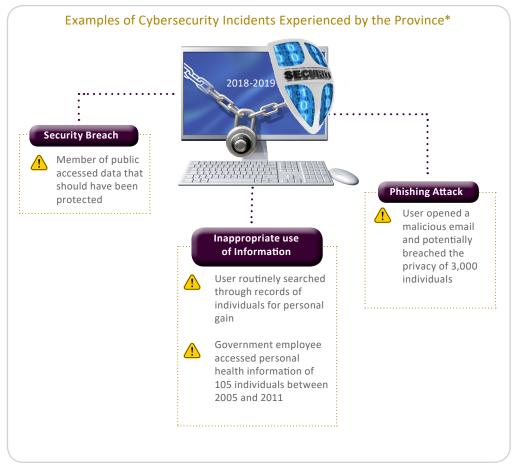
- 3.1 The purpose of this chapter is to inform Nova Scotians on important selected matters potentially impacting the Province. This chapter addresses cybersecurity, government purchasing cards, and follows up on previously reported matters in the areas of fraud risk management, public sector pensions, and internal meetings and employee social events expenses.
- 3.2 In following up on matters from our October 2018 Financial Report, we inquired of management at government departments, public service units, and organizations and reviewed information on their websites. These areas noted above, as well as management's responses, have not been audited; however, we did confirm the contents of this chapter with the named organizations.

Cybersecurity

- 3.3 Background As with any organization, cybersecurity is a significant risk facing the Province. It is critical for government departments and organizations to understand and effectively manage cybersecurity risks.
- 3.4 In 2016, the Department of Service Nova Scotia and Internal Services (SNS-IS)¹ hired a Chief Information Security Officer to develop a cybersecurity program and lead a Cyber Security and Risk Management Division (Division), reporting directly to the Associate Deputy Minister.
- 3.5 SNS-IS management indicated that the Cyber Security and Risk Management Division is responsible for the security of the Province's network used by approximately 70 government organizations. Efforts to protect the network include:
 - identifying cybersecurity risks to the Province
 - approving new technology or changes to existing technology to ensure it is secure
 - managing the Province's anti-virus software and firewalls
 - performing vulnerability scans on the network and conducting penetration testing
 - notifying other departments or divisions when risks that impact their information technology are identified



- implementing a mandatory cybersecurity awareness and education program for all employees (in progress)
- 3.6 Threats to an organization's cybersecurity can be from external hackers, business partners, vendors, contractors, or employees who either intentionally or unintentionally compromise cybersecurity. Cybercriminals, or trusted employees and partners, can affect the confidentiality, integrity, and availability of government's information technology or data, whether managed in-house or through cloud services. Impacts to the Province could include:
 - information held for ransom
 - theft of financial assets
 - misuse of personal or financial information
 - disruption of operations
- 3.7 The following diagram details some of the Province's recent cybersecurity incidents reported by the media.



^{*} Details of these specific cybersecurity incidents were obtained from local media reporting.





Regulations requiring organizations to obtain IT shared services have not been finalized

3.8 The Shared Services Act of 2014 requires that regulations be developed to define what shared services are to be provided and what departments, crown corporations, and government organizations are to receive those shared services. These regulations have not been finalized; however, management indicated they are currently being drafted. Finalizing these regulations would assist organizations in understanding their responsibilities for addressing cybersecurity risks.



The Province initiated a cybersecurity risk management program

3.9 The Province continues to develop its cybersecurity risk management program. The program uses guidance and objectives from the NIST Cyber Security framework and the Canadian Centre for Cybersecurity, which are industry accepted standards. SNS-IS created a charter for the Province's Cyber Security and Risk Management Division that outlines the principles to be followed by organizations under the Shared Services Act.



The Department of Service Nova Scotia and Internal Services may not be managing all of its cybersecurity risks

- 3.10 As part of a cybersecurity risk management program, an organization should establish a process for identifying, assessing, and managing all cybersecurity risks. SNS-IS indicated that the Cyber Security and Risk Management Division maintains its own risk register; however, SNS-IS is still developing a government-wide IT risk management program that will consider all components of cybersecurity, not just those areas under the Division's responsibility. As a result, at present, SNS-IS may not be managing all of its cybersecurity risks faced by the Province.
- 3.11 We encourage the Department of Service Nova Scotia and Internal Services to maintain its risk registers and to implement their government-wide IT risk management program in a timely manner.



Cybersecurity is a shared responsibility

3.12 Although IT services were centralized and the Cyber Security and Risk Management Division was created, government departments and organizations still have some level of responsibility for cybersecurity. For example, government organizations can have cybersecurity responsibility for their data, information technology (e.g., applications, databases, servers), medical technology (e.g., heart monitors, drug dispensing equipment) or technology capable of connecting to the internet (e.g., cell phones, tablets, watches). The level of responsibility is dependent on each organization's IT environment.



- 3.13 Some government organizations use the Province's data centre and network to run their own applications and store data. Other government organizations operate applications and store data independently on their own networks or in the cloud. Regardless, all government organizations that own data, applications, servers, or manage networks have certain responsibilities and roles in relation to cybersecurity.
- 3.14 The size, complexity, and constant evolution of government operations require that organizations understand their cybersecurity responsibilities. We surveyed 10 significant government organizations to determine their perspective on cybersecurity responsibilities, whether they have governance structures in place to deal with cybersecurity, and if they implemented a cybersecurity risk management program.

Responses from Government Organizations on Cybersecurity					
Government Organization	Level of Responsibility for Cybersecurity	Cybersecurity Governance Structure in Place	Cybersecurity Risk Management Program Implemented		
Halifax-Dartmouth Bridge Commission	Shared	Yes	No		
Halifax Regional Centre for Education	Full	Yes	Yes		
Housing Nova Scotia	None	No	No		
Izaak Walton Killam Health Centre	Shared	Yes	Yes		
Nova Scotia Community College	Full	Yes	Yes		
Nova Scotia Farm Loan Board	Shared	Yes	No		
Nova Scotia Health Authority	None	No	Yes*		
Nova Scotia Legal Aid Commission	Shared	Yes	Yes		
Nova Scotia Liquor Corporation	Shared	Yes	Yes		
Nova Scotia Municipal Finance Corporation	Shared	No	No		
Total	2 Full 6 Shared 2 None	7 Yes (70%) 3 No (30%)	6 Yes (60%) 4 No (40%)		

^{*} Nova Scotia Health Authority indicated in their survey response that they rely extensively on SNS-IS for cybersecurity services and therefore has in place a cybersecurity risk management program. (unaudited)



Results of the survey show a varied understanding of cybersecurity responsibilities

- 3.15 Because all organizations surveyed own applications or data, it would be expected that all would have some level of responsibility for cybersecurity. Eight of the 10 organizations surveyed indicated they have either shared or full responsibility for the cybersecurity of their information technology.
- 3.16 Nova Scotia Health Authority indicated in its survey response that it relies extensively on SNS-IS for cybersecurity services and therefore does not have cybersecurity responsibilities for IT infrastructure. However, the Health



Authority has cybersecurity responsibilities for many clinical applications and related data which are not managed by SNS-IS. As part of the annual financial statement audit of the Health Authority, we recommended that it define the scope of its cybersecurity responsibilities and implement a cybersecurity program. Management agreed with the recommendation.

3.17 In its survey response, Housing Nova Scotia identified that SNS-IS was fully responsible for its cybersecurity as a result of its relationship to the Department of Municipal Affairs and Housing (previously Department of Community Services). However, Housing Nova Scotia uses a system supported by a third-party vendor and therefore has cybersecurity responsibilities.



3 government organizations surveyed indicated they do not have a cybersecurity governance structure

3.18 Organizations should have a governance structure in place to ensure roles and responsibilities are known and understood. Housing Nova Scotia, Nova Scotia Health Authority, and Nova Scotia Municipal Finance Corporation commented that they rely on SNS-IS for their cybersecurity services and therefore do not have a cybersecurity governance structure. Without such structure, confusion about roles and responsibilities for specific aspects of cybersecurity is possible and creates opportunities for security weaknesses.



4 government organizations surveyed reported they do not have a cybersecurity risk management program

- 3.19 A cybersecurity risk management program provides definitive information on how an organization will manage cybersecurity-related risks. Survey results show that as at March 31, 2019, four organizations surveyed had not implemented a program.
 - Halifax-Dartmouth Bridge Commission indicated they are in the development stage
 - Housing Nova Scotia, Nova Scotia Farm Loan Board, and Nova Scotia Municipal Finance Corporation indicated they rely on SNS-IS
- 3.20 The Nova Scotia Health Authority indicated that it depends on SNS-IS for cybersecurity and as a result, relies on SNS-IS to manage the Health Authority's cybersecurity risks around IT infrastructure. Consequently, the Health Authority reported it has a cybersecurity risk management program; however, SNS-IS's risk frameworks do not take into consideration the Nova Scotia Health Authority's clinical data and applications. The Health Authority indicated it has started to plan a cybersecurity strategy in consultation and collaboration with SNS-IS.



3.21 Reliance on SNS-IS for IT services is valid; however, this does not alter an organization's responsibility to implement its own cybersecurity risk management program appropriate to its IT environment. An organization must ensure that any data or applications for which it is responsible are protected against cybersecurity risks.

Purchasing Card Risk Management

- 3.22 Background Purchasing cards are credit cards that are paid directly by the employer without the cardholder having to initially provide purchasing support. As a result, it is important for an organization to demonstrate strong oversight in this area by:
 - implementing a thorough purchasing card policy
 - assessing fraud risks over purchasing cards
 - monitoring and reporting on purchasing card controls
- 3.23 We inquired of 10 of the Province's significant organizations about their use of purchasing cards. We asked if they used purchasing cards, and if so, did they have a purchasing card policy in place and if they had formally assessed the risks and key controls pertaining to purchasing cards.
- 3.24 Both Housing Nova Scotia and the Nova Scotia Legal Aid Commission confirmed that they do not use purchasing cards. The responses from the eight organizations that use purchasing cards are summarized below.

Responses from Government Organizations on Purchasing Cards			
Government Organization	Purchasing Card Policy Implemented	Purchasing Card Risk and Control Assessments Completed	
Halifax Regional Centre for Education	Yes	No	
Halifax-Dartmouth Bridge Commission	Yes	Yes	
Izaak Walton Killam Health Centre	Yes	Yes	
Nova Scotia Community College	Yes	Yes	
Nova Scotia Farm Loan Board	Yes	No	
Nova Scotia Health Authority	Yes	Yes	
Nova Scotia Liquor Corporation	Yes	No	
Nova Scotia Municipal Finance Corporation	No	No	
Total	7 Yes (88%) 1 No (12%)	4 Yes (50%) 4 No (50%)	





1 significant organization surveyed has not implemented a purchasing card policy

3.25 Our survey shows that the Nova Scotia Municipal Finance Corporation is the only surveyed government organization using purchasing cards that has not yet implemented a purchasing card policy. It is important that the Nova Scotia Municipal Finance Corporation implement a purchasing card policy to assist in holding cardholders accountable and ensure that purchasing card transactions are appropriately reviewed, approved, and recorded.



4 of 8 surveyed government organizations using purchasing cards have not assessed the risks related to their use

- 3.26 Our survey also shows the need for government organizations that use purchasing cards to assess the risks relating to their use and ensure that adequate controls are in place to manage the risk of fraud. The following four surveyed organizations using purchasing cards confirmed that they have not completed a formal risk or control assessment related to purchasing cards.
 - Halifax Regional Centre for Education
 - Nova Scotia Farm Loan Board
 - Nova Scotia Liquor Corporation
 - Nova Scotia Municipal Finance Corporation
- 3.27 While the use of purchasing cards may be an effective way to purchase goods or services, without assessing the risks relating to purchasing card spending, it is difficult for government organizations to ensure adequate controls are in place relating to their use.

Update on Fraud Risk Management

- 3.28 Background Fraud within the public sector is concerning because it can result in the loss of taxpayer assets and reduce the public's confidence in the Province's financial reporting. It is important for the Province to have mechanisms in place to appropriately manage fraud risk.
- 3.29 To manage fraud risk, the Province, in 2017 implemented a fraud policy. The policy directly applies to all government departments, public service units, and crown corporations, and although not required, it was recommended that other government organizations embrace the intent of the policy. A Fraud Management Committee governs the departmental fraud risk management program. Specific components of the program include:
 - Fraud policies and procedures
 - Fraud risk assessments



- Fraud awareness and education
- Fraud prevention and detection techniques
- 3.30 In 2017, we identified weaknesses in the Province's fraud risk management program and recommended that Executive Council Office ensure those responsible for oversight of government departments and organizations address these weaknesses. Last year, we followed up and noted that government departments and organizations were slow in improving their management of fraud risks.



Fraud risk management programs are not improving quickly enough

- 3.31 2019 follow-up We followed up with Executive Council Office for an update on the status of the fraud risk management program. See Appendix V for the update from the Chair of the Deputy Ministers' Audit Committee on the Government's fraud management program.
- 3.32 We also followed up with government departments and organizations for updates on the status of their fraud risk management programs. The table below summarizes the status as at March 31, 2019 and Appendices I and III show the status of each individual department and organization.

Summary Status of Certain Aspects of Fraud Risk Management Programs in Government Departments and Organizations						
March 31, 2019 March 31, 201						
Government Departments						
Fraud risk assessment	9 Yes (53%) 8 No (47%)	3 Yes (18%) 14 No (82%)				
Government Organizations						
Fraud policy	42 Yes (82%) 9 No (18%)	33 Yes (65%) 18 No (35%)				
Fraud risk assessment	29 Yes (57%) 22 No (43%)	10 Yes (20%) 41 No (80%)				
Evaluated usefulness of fraud hotline	38 Yes (75%) 13 No (25%)	23 Yes (45%) 28 No (55%)				



47% of government departments have not completed fraud risk assessments

- 3.33 As at March 31, 2019, 8 of 17 (47%) departments had not completed fraud risk assessments. This may be an improvement from last year; however, progress is not fast enough.
- 3.34 Many sizeable departments, such as Education and Early Childhood Development, and Internal Services², still have not completed fraud risk

²The Department of Internal Services was renamed the Department of Service Nova Scotia and Internal Services on June 3, 2019



assessments. All departments should complete fraud risk assessments; however, the need for the Department of Service Nova Scotia and Internal Services to complete its assessment is elevated because of the Department's significant control weaknesses.



57% of government organizations completed fraud risk assessments

3.35 Our 2019 follow-up of government organizations noted improvement in the number of fraud risk assessments completed. As at March 31, 2019, 57 percent of government organizations completed fraud risk assessments. This is an improvement from last year when 20 percent of organizations had completed fraud risk assessments.



6 public educational organizations do not have a fraud policy and have not completed a fraud risk assessment

- 3.36 The need for the seven regional centres for education and Conseil scolaire acadien provincial to effectively manage their fraud risks is important. However, the following do not have a fraud policy and have not yet completed a fraud risk assessment.
 - Annapolis Valley
- Conseil scolaire acadien provincial
- Cape Breton-Victoria
- South Shore
- Chignecto-Central
- Tri-County
- 3.37 Department of Education and Early Childhood Development management indicated it plans to have each regional centre for education and Conseil scolaire acadien provincial complete a fraud risk assessment and implement a common fraud policy in 2019-20.



Province's fraud tip hotline not yet implemented

- 3.38 Fraud research conducted by the Association of Certified Fraud Examiners shows that tips are the most common method of detecting fraud³. In 2017, we noted that no government department was using a fraud tip hotline and recommended that the Province address this weakness. In 2017, the Province confirmed they would evaluate the usefulness of a fraud tip hotline and in 2018 expected to have it in place by December 2018. The Province has yet to implement a fraud tip hotline.
- 3.39 Government organizations should also evaluate the usefulness of a fraud tip hotline. Our enquiry of government organizations revealed that while 38 (75%) evaluated the usefulness of a fraud tip hotline, 13 (25%) did not. Refer to Appendix III for the status of each government organization.

³Report to the Nations on Occupational Fraud and Abuse – 2014 Global Fraud Study, Association of Certified Fraud Examiners



13 government departments and 4 organizations are not evaluating and reporting on the effectiveness of their fraud risk management programs

- 3.40 Regularly evaluating and reporting on fraud risk management operations helps a department or organization ensure it has designed an appropriate process that prevents and detects fraud in the current environment. Therefore, government departments and organizations should regularly evaluate and report on how well it is managing its fraud risks.
- 3.41 We surveyed all government departments and nine significant government organizations to determine if they regularly evaluate and report on whether their fraud risk management process is working effectively. The results are summarized in the table below and the status for each government department and organization is shown in Appendix I and IV, respectively.

Summary Status of Government Departments and Organizations Regularly Evaluating and Reporting on Effectiveness of Fraud Management			
Regularly Evaluate and Report on Effectiveness of Fraud Management			
Government Departments	4 Yes (24%) 13 No (76%)		
Government Organizations	5 Yes (56%) 4 No (44%)		



Mandatory fraud training is not being taken as required

- 3.42 The Province's mandatory fraud training for government departments and public service units became available following release of the Government's Fraud Policy in June 2017 and helps in the management of fraud. Management's responses in Appendices I and II show fraud training completion rates range from 11 percent to 100 percent as at March 31, 2019. Low completion rates of mandatory fraud training diminish the Province's ability to effectively manage fraud.
- 3.43 The following table notes the three government departments and four public service units with fraud training completion rates below 35 percent.



Departments and Public Service Units with Fraud Training Completion Rates Below 35%				
Department % of Employees who Completed Fraud Tra as at March 31, 2019				
Transportation and Infrastructure Renewal	11%			
Seniors	20%			
Environment	31% % of Employees who Completed Fraud Training as at March 31, 2019			
Public Service Unit				
Office of the Information and Privacy Commissioner	14%			
Human Rights Commission	17%			
Communications Nova Scotia	27%			
Office of Regulatory Affairs and Service Effectiveness	27%			



67% of significant government organizations surveyed provide fraud training

3.44 We surveyed nine significant government organizations to determine whether fraud training is provided. Although only three of nine organizations make fraud training mandatory, six of these organizations provide fraud training to employees. The survey results are summarized below.

Government Organization's Response to Fraud Training				
Government Organization Fraud Training Provided to all Employe				
Halifax-Dartmouth Bridge Commission	Yes			
Halifax Regional Centre for Education	Yes			
Izaak Walton Killam Health Centre	No			
Nova Scotia Community College	No			
Nova Scotia Farm Loan Board	Yes*			
Nova Scotia Health Authority	No			
Nova Scotia Legal Aid Commission	Yes			
Nova Scotia Liquor Corporation	Yes*			
Nova Scotia Municipal Finance Corporation	Yes*			
Total	6 Yes (67%) 3 No (33%)			

^{*} Management indicated fraud training is mandatory

3.45 Employees who complete fraud training are better able to understand, prevent, and detect fraud and enhance an organization's ability to manage fraud. We encourage government organizations to evaluate the need for mandatory fraud training.

Update on Public Sector Pensions

3.46 Pension plans are a significant financial and legal liability of the Province of Nova Scotia and are important to public sector employees that plan on



receiving pension plans once they retire. In 2017, we highlighted the financial health of the three largest public sector pension plans in Nova Scotia – the health care plan, the public service plan, and the teachers' plan.



The Province, the Nova Scotia Teachers' Union, and the Trustee are looking at ways to improve the long-term financial health of the teachers' pension plan

- 3.47 In 2018, we followed up and found that the Province and the Nova Scotia Teachers' Union (the NSTU) did not have a formal plan in place to address the \$1.4 billion deficit in the teachers' pension plan. We recommended the Province initiate discussions with the NSTU to develop and implement a formal plan to address the deficit.
- 3.48 During the year, the Province, the NSTU, and the Trustee, hired an independent pension consultant to identify ways to improve the long-term financial sustainability of the teachers' pension plan.

Update on Internal Meetings and Employee Social Events Expenses



Government has not yet provided promised guidance on internal meetings and employee social events costs

- 3.49 In 2018, we examined internal meetings and employee social events costs to determine if these expenses complied with existing policies, were appropriately supported, and correctly classified. From this work in 2018, we noted a lack of formalized policy across government in the areas of internal meetings and employee social events. We recommended that Executive Council provide guidance on internal meeting and employee social event expenses that clarifies the nature and accounting of acceptable costs to ensure these expenses meet public expectations, are supportable, and well-documented.
- 3.50 Guidance in this area would provide more direction to departments and employees. For example, an employee should be able to easily understand if costs for internal meetings or events such as birthdays, retirements, or Christmas parties are acceptable.
- 3.51 This year, we followed up with Executive Council Office to determine whether it provided guidance on internal meeting and employee social event expenses. We were informed that discussions on this matter are ongoing with a goal to establish corporate guidelines by the end of the calendar year and to implement the guidelines by January 1, 2020.
- 3.52 It is important that Executive Council Office address this recommendation, as there is a public expectation for these types of expenses to be well-managed.



Appendix I

Management's Responses from Government Departments Regarding Certain Aspects of a Fraud Management Program

Of the 17 government departments listed in Schedule 10 of the 2019 Public Accounts, below is the March 31, 2019 status of certain aspects of a fraud management program.

Government Department	Fraud Risk Assessment	Evaluate and Report on Effectiveness of Fraud Risk Management	% of Employees who Completed Fraud Training as at March 31, 2019
Agriculture	No	No	65%
Business	Yes	No	54%
Communities, Culture and Heritage	No*	No	48%
Community Services	Yes	No	38%
Education and Early Childhood Development	No	No	55%
Energy and Mines	Yes	Yes	62%
Environment	No	No	31%
Finance and Treasury Board	Yes	No	50%
Fisheries and Aquaculture	No	No	57%
Health and Wellness	Yes	No	63%
Internal Services ⁴	No	No	65%
Justice	Yes	Yes	66%
Labour and Advanced Education	Yes	Yes	90%
Lands and Forestry	No	No	66%
Municipal Affairs⁵	No*	No	96%
Seniors	Yes	No	20%
Transportation and Infrastructure Renewal	Yes	Yes	11%
Total	9 Yes (53%) 8 No (47%)	4 Yes (24%) 13 No (76%)	-

^{*}Management indicated progress is being made (unaudited)

⁴The Department of Internal Services was renamed the Department of Service Nova Scotia and Internal Services on June 3, 2019 ⁵The Department of Municipal Affairs was renamed the Department of Municipal Affairs and Housing on June 3, 2019



Appendix II

Management's Responses from Public Service Units Regarding Mandatory Fraud Training Completion Rates

Of the 18 public service units listed in Schedule 10 of the 2019 Public Accounts, below is the March 31, 2019 status of mandatory fraud training completion rates.

Public Service Unit	% of Employees who Completed Fraud Training as at March 31, 2019		
Aboriginal Affairs	59%		
Communications Nova Scotia	27%		
Elections Nova Scotia	67%		
Executive Council	76%		
Human Rights Commission	17%		
Intergovernmental Affairs	53%		
Legislative Services	94%		
Nova Scotia Police Complaints Commissioner	75%		
Nova Scotia Securities Commission	38%		
Office of Immigration	80%		
Office of Regulatory Affairs and Service Effectiveness	27%		
Office of Service Nova Scotia	60%		
Office of Strategy Management	100%		
Office of the Auditor General	97%		
Office of the Information and Privacy Commissioner	14%		
Office of the Ombudsman	88%		
Public Prosecution Service	50%		
Public Service Commission	97%		



Appendix III

Management's Responses from Government Organizations Regarding Certain Aspects of a Fraud Management Program

Of the 53 active government organizations (governmental units, government business enterprises, government partnership arrangements) listed in Schedule 10 of the 2019 Public Accounts, below is the March 31, 2019 status of certain aspects of a fraud management program.

Government Organization	Fraud Policy	Fraud Risk Assessment	Evaluated Usefulness of Fraud Hotline
A. Education Sector			
Annapolis Valley Regional Centre for Education	No	No	Yes
Atlantic Provinces Special Education Authority	No	No	No
Cape Breton-Victoria Regional Centre for Education	No	No	No
Chignecto-Central Regional Centre for Education	No	No	No
Education Conseil scolaire acadien provincial	No	No	No
Halifax Regional Centre for Education	Yes	No	Yes
Nova Scotia Education Common Services Bureau	No	No	No
Nova Scotia Community College	Yes	Yes	Yes
Nova Scotia School Insurance Exchange	Yes	No	No
Nova Scotia School Insurance Program Association	Yes	No	No
South Shore Regional Centre for Education	No	No	Yes
Strait Regional Centre for Education	No	Yes	Yes
Tri-County Regional Centre for Education	No	No	No

B. Health Sector			
Izaak Walton Killam Health Centre	Yes	Yes	Yes
Nova Scotia Health Authority	Yes	No ⁶	Yes
Nova Scotia Health Research Foundation	Yes	Yes	No

C. Sizeable Organizations			
Art Gallery of Nova Scotia	Yes	No	Yes
Canada-Nova Scotia Offshore Petroleum Board	Yes	Yes	Yes
Develop Nova Scotia	Yes	Yes	No
Halifax Convention Centre Corporation	Yes	No	Yes
Halifax-Dartmouth Bridge Commission	Yes	Yes	Yes

⁶Nova Scotia Health Authority management indicated that a fraud risk assessment is completed for 75% of expenditures (payroll) with a plan developed to complete the remainder (unaudited)



Government Organization	Fraud Policy	Fraud Risk Assessment	Evaluated Usefulness of Fraud Hotline	
C. Sizeable Organizations				
Harbourside Commercial Park Inc.	Yes	Yes	Yes	
Highway 104 Western Alignment Corporation	Yes	Yes	Yes	
Housing Nova Scotia	Yes	Yes	Yes	
Nova Scotia Business Inc.	Yes	Yes	Yes	
Nova Scotia Crop and Livestock Insurance Commission	Yes	Yes	Yes	
Nova Scotia Farm Loan Board	Yes	No	Yes	
Nova Scotia Fisheries and Aquaculture Loan Board	Yes	No	Yes	
Nova Scotia Gaming Corporation	Yes	Yes	Yes	
Nova Scotia Innovation Corporation	Yes	Yes	Yes	
Nova Scotia Lands Inc.	Yes	Yes	Yes	
Nova Scotia Legal Aid Commission	Yes	No	Yes	
Nova Scotia Liquor Corporation	Yes	Yes	Yes	
Nova Scotia Municipal Finance Corporation	Yes	Yes	Yes	
Nova Scotia Power Finance Corporation	Yes	Yes	Yes	
Nova Scotia Utility and Review Board	Yes	Yes	Yes	
Public Archives of Nova Scotia	Yes	Yes	No	
Tourism Nova Scotia	Yes	Yes	Yes	

D. Others			
Arts Nova Scotia	Yes	No	No
Canadian Sport Centre Atlantic	Yes	No	No
Council of Atlantic Premiers	Yes	Yes	Yes
Creative Nova Scotia Leadership Council	No Response	No Response	No Response
Gambling Awareness Foundation of Nova Scotia	Yes	No ⁷	Yes
Invest Nova Scotia Board	Yes	Yes	Yes
Law Reform Commission of Nova Scotia	Yes	Yes	Yes
Nova Scotia Primary Forest Products Marketing Board	No Response	No Response	No Response
Nova Scotia Strategic Opportunities Fund Incorporated	Yes	No	Yes
Perennia Food & Agriculture Incorporated	Yes	No	Yes
Resource Recovery Fund Board Inc.	Yes	Yes	Yes
Schooner Bluenose Foundation	Yes	Yes	Yes
Sherbrooke Restoration Commission	Yes	Yes	Yes
Sydney Steel Corporation	Yes	Yes	Yes
Sydney Utilities Limited	Yes	Yes	Yes

1	Total	42 Yes (82%)	29 Yes (57%)	38 Yes (75%)
١		9 No (18%)	22 No (43%)	13 No (25%)



Appendix IV

Management's Responses from Nine of the Province's Significant Organizations Regarding Evaluating and Reporting on the Effectiveness of Its Fraud Risk Management

Of nine significant organizations listed in Schedule 10 of the 2019 Public Accounts, below is the March 31, 2019 status of the organization regularly evaluating and reporting on the effectiveness of fraud risk management.

Government Organization	Regularly Evaluate and Report on Effectiveness of Fraud Risk Management
Halifax-Dartmouth Bridge Commission	Yes
Halifax Regional Centre for Education	No
Izaak Walton Killam Health Centre	No
Nova Scotia Community College	Yes
Nova Scotia Farm Loan Board	Yes
Nova Scotia Health Authority	Yes
Nova Scotia Legal Aid Commission	No
Nova Scotia Liquor Corporation	Yes
Nova Scotia Municipal Finance Corporation	No
Total	5 Yes (56%) 4 No (44%)



Appendix V

Update from the Chair of the Deputy Ministers' Audit Committee on Government's Fraud Management Program

Government has a Fraud Management Program to manage the risk of fraud. The Program is governed by a Fraud Management Committee, with government-wide representation, and oversight from the Deputy Ministers' Audit Committee. A formal mandate for the Fraud Management Committee outlines its purpose, authority, responsibilities, and composition. The step-by-step implementation of this Program is an explicit demonstration of Government's commitment to a sustainable culture of respect, integrity, diversity, accountability and the public good.

A Fraud Policy was included in the Corporate Administrative Policy Manuals, Management Manual 200 in 2017. The Policy is supported by detailed procedures for reporting and investigating fraud. In addition, mandatory fraud awareness training has been available online for government employees since the Policy was released. This has been completed by more than 7,100 employees and the completion rates are reviewed by the departments every three months. The training was recently updated to be compatible with Government's new learning platform and includes accessibility features that were not available in the previous version. The revised training has been formatted for a broader audience.

Government is committed to the completion of fraud risk assessments to identify and assess the likelihood and significance of specific fraud schemes and risks, evaluate control activities, and implement action to address fraud risks. Fraud risk assessments are completed and in progress; however, the completion rates need to improve. Government is supporting this effort with the use of a fraud risk assessment framework to ensure that assessments meet an appropriate standard and are consistently applied, a fraud risk self-assessment toolkit distributed to the departments to assess and identify areas at a high risk for fraud, the development of a streamlined process for procuring fraud risk assessments from third party service providers, and the development of an experienced team of fraud investigators with experience completing fraud risk assessments.

An independent third-party vendor has been selected through a government procurement process to manage the Provincial Fraud Reporting Service (e.g. hotline, webform, email reporting). The service will be available 24 hours a day, 365 days per year.

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5161 George Street, Royal Centre, Suite 400 Halifax, Nova Scotia B3J 1M7 https://oag-ns.ca

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