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Chapter 1 Introductory Comments

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Chapter 1 Introductory Comments

Introductory Comments

Volume II Reports our 2012 Value-for-Money/Performance Work

- **1.1** In this volume of our 2012 Report, we report on the following value-for money/performance projects:
 - Medicare Payments to Doctors;
 - EHealth Procurement and Conflict of Interest:
 - Solid Waste Commissions:
 - Capital Maintenance of Highways; and
 - Follow-up work on recommendations from past value-for-money/performance reports.

Medicare – Payments to Doctors

1.2 The objective of our work on Medicare – Payments to Doctors was to determine if the Department of Health is maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function.

E-Health

- **1.3** The objective of our work on EHealth Procurement and Conflict of Interest was to determine:
 - if the Department of Health complied with government procurement policy for purchase of Information Technology services related to the E-Health initiative; and
 - if conflict of interest existed in the use of consultants/contractors.

Solid Waste Commissions

1.4 The objective of our work on Solid Waste
Commissions was to assess the adequacy of the
governance and oversight structures and processes for
New Brunswick solid waste commissions.

Capital Maintenance of Highways

1.5 The objective of our work on Capital Maintenance of Highways was to determine whether capital road repairs, identified as necessary by the Department of Transportation and Infrastructure, are made on a timely basis.

Introductory Comments Chapter 1

Auditor General's concern with the sustainability of the Province's infrastructure

challenge regarding the long term sustainability of New Brunswick's 20,000 kilometers of highways. We have concluded that although the Department of Transportation and Infrastructure (DTI) has appropriate tools in place to identify and prioritize required capital highway maintenance projects, current funding levels do not allow the completion of optimal maintenance treatments on a timely basis. This will result in deferring required maintenance to future periods at greater overall cost to the Province.

Two very different approaches for maintaining New Brunswick highways 1.7 Conversely, during the prior three year period of higher funding levels (fiscal 2009, 2010 and 2011), the Department made progress on a key objective to prevent deterioration of highways. However, during this time, the fiscal state of our Province declined through increased deficits and debt.

Trade off between the approaches

1.8 These two very different approaches were each intended to achieve worthy objectives. However, each approach has unfortunate secondary consequences. There is a tradeoff between the fiscal sustainability of our Province and the sustainability and safety of our highways.

Schools - deferred maintenance concerns

- 1.9 On two former occasions (2011 and 2005), Auditor General Reports have included similar concerns with respect to the deferred maintenance of New Brunswick schools. The 2011 Report stated that if the situation continues, additional unanticipated school closures like the 2010 mid-year school closure of Moncton High School and Polyvalente Roland-Pépin in Campbellton will continue.
- 1.10 The Province's infrastructure is here for the long-term. Many capital assets (including highways, hospitals, schools, bridges, etc.) are intended to provide essential service for 40 years or more. However, the Province's approach to maintaining these important assets is short-term focused.
- 1.11 The only exception to this practice is assets constructed using Public Private Partnerships (P3). Such arrangements involve a long-term contractual agreement which binds the Province and effectively protects the funding stream, thus ensuring P3 assets

Chapter 1 Introductory Comments

are maintained.

Long term infrastructure sustainability plan required

1.12 Our Province needs a comprehensive long-term infrastructure plan that will ensure the sustainability and safety of all essential infrastructure, including highways, hospitals, schools, bridges, etc while respecting the fiscal challenges faced by the Province.

Key elements of a long-term infrastructure sustainability plan

1.13 Key elements of the plan should include:

- the rationalization of assets (i.e. if not considered essential, remove from service and dispose in an appropriate manner);
- a long term approach to budgeting which includes life cycle maintenance;
- a protected stream of a base level of funding determined necessary to adequately maintain assets in service;
- a 20 year planning horizon;
- a process whereby new assets are constructed only when there is a business case to support the need.
 This should include redirecting savings from rationalized assets to the new asset life cycle maintenance costs;
- apply the current DTI strategy and asset management system to all essential assets. This would result in a corporate approach which applies the least cost lifecycle prioritization to all essential assets; and
- provide annual public performance reporting, which includes the actual physical condition of our essential assets versus pre-established targets, explaining the reason for any significant variances.

Fiscal discipline required over the long-term

1.14 In order to be successful there must be fiscal discipline to adhere to the long-term infrastructure sustainability plan.

Introductory Comments Chapter 1

Follow up on recommendations from past value-for-money/ performance work 1.15 This volume of our Report contains Follow-up work on department and Crown agency progress in implementing our recommendations. We hope Members of the Public Accounts and Crown Corporations Committees will find the information presented useful during committee deliberations.

1.16 Also included are:

- Appendix A which contains a "Summary of Significant Projects Conducted in Departments and Crown Agencies over the Past Ten Years"
- 2. Appendix B, a "Detailed Status Report of Recommendations Since 2008."
- 3. New this year is a Glossary referencing report sections relevant to each department or Crown agency. This is intended to make it easier for committee members to find all department or Crown specific report comments throughout as they appear before the committee(s).

Acknowledgements

1.17 Staff of the Office has worked very hard in carrying out the work contained in this volume of our Report. This report is a reflection of their level of commitment, professionalism and diligence. I would like to express my appreciation to each one for their contribution and continuing dedication to fulfilling the mandate of the Office of the Auditor General.

Kim MacPherson, CA
Auditor General

Chapter 2 Department of Health Medicare Payments to Doctors

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Department of Health Medicare Payments to Doctors

Main Points

Objective of our work

- Brunswickers. In the 2010-2011 fiscal year (2011), roughly 1,873 doctors were paid under this program. Medicare expenditures for 2011 were slightly more than half of a billion dollars (\$553.3 million). This represented 22.3% of the Department of Health's expenditures of approximately \$2.5 billion. Medicare represents one of government's highest cost programs with consistent growth. ¹
- 2.2 The objective of our work was: to determine if the Department of Health (Department) is maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function.
- **2.3** The audit function is very important for many reasons, including the following:
 - In addition to monitoring compliance with legislation, agreements and policies and identifying incorrect payments to recover, a strong audit function serves as a deterrent to doctors inappropriately billing Medicare.
 - The Fee-For-Service (FFS) payment system is based upon the honour system. The onus is on the doctor to accurately submit FFS claims. It is not practical for Medicare to confirm that patients received services from doctors prior to paying claims. Inherent in any such system is a risk of incorrect or inappropriate claims. This inherent risk can be mitigated via payment controls, consistent

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¹ Figures from: Province of New Brunswick, 2010-2011 Annual Report - Department of Health, September 2011, page 95.

monitoring and audit.

- 2.4 We found the audit coverage of payments to doctors is incomplete (which we report in the section titled, *Audit and Enforcement Functions*), and for this reason we also report observations on the different types of payments to doctors (FFS, salary and sessional). We also discuss public reporting of doctor remuneration in the second section titled, *Doctor Remuneration and Public Reporting*.
- 2.5 The observations on payments to doctors are intended to highlight unusual items that, in our professional opinion as auditors, may warrant further investigation by the Department (i.e. the audit unit or other monitoring groups within the Department). However, we performed no such investigations pursuant to our work.
- 2.6 Doctors play a vital role in the Medicare program and are essential in the delivery of health care in our Province. It is important to note our work was not intended to assess the quality of doctors' services in any way.
- 2.7 The Department provided full cooperation during our work. There was one instance where we requested a legal opinion which the Department did not provide; however, this had minimal impact on our findings. We are pleased to report there were cases when we verbally presented findings during the course of our work and the Department took immediate corrective action.

Highlights

2.8 There are three ways doctors are paid by Medicare:

- 1) Fee-For-Service (FFS) a payment is made for each service performed by the doctor (i.e. similar to piece work);
- 2) salary a fixed annual remuneration according to a provincial agreement, the *Medical Pay Plan* (MPP); and
- 3) sessional an hourly rate per hours of service provided.

Many doctors are paid using more than one of these methods.

- **2.9** Medicare payments to some doctors appear high when compared to budget estimates. Information provided by the Department for 2011 showed the following:
 - Sixteen doctors were paid over \$1 million each. The doctor paid the most by Medicare in 2011 was an ophthalmologist who received \$1,652,786;
 - 219 of 1,873 doctors (12%) were paid more than half a million dollars each; and
 - 826 of 1,873 doctors (44%) were paid more than \$300,000. Note if the doctors with remuneration less than \$100,000 (part-time doctors) were excluded, this would increase to 56%.
- **2.10** According to the Department, the following figures were used while budgeting for 2011. "The estimated annual earnings of a general practitioner is \$291,418 and the average annual earnings of a specialist is \$420,977 (this specialty average is the average earnings of all specialties)." Given this, we believe remuneration greater than these figures should be considered high.
- **2.11** Only a portion of Medicare payments to doctors gets audited. While the Department has authority to audit all Medicare payments, only some types of payments to doctors are audited. A portion of FFS payments is audited. However, radiology, salary and sessional payments to doctors are not audited. At the time of our work, only 53% of Medicare payments to doctors were subjected to audit.
- 2.12 We believe although it may be more difficult to audit some types of Medicare payments, given the magnitude of the payments involved, alternate audit methods should be pursued so all types of payments (100%) are included in the audit population.
- **2.13** *Monitoring of Medicare payments to doctors is inadequate.* There is no monitoring of radiologist remuneration by the Department. Monitoring of FFS payments and payments to salary doctors is lacking.
- **2.14** We believe the Department should develop, document, assign and implement proper monitoring procedures for all Medicare payments (FFS, salary, sessional), including FFS payments to salaried doctors

such as the cap and the "on-call group account".

- 2.15 Public reporting of doctor remuneration is incomplete and misleading. There is no public reporting of the total amount paid to individual doctors within the Medicare program. Currently, some salaried doctors are publicly reported, but not all. For many of those doctors who are publicly reported, only a portion of their remuneration is shown. The Department indicated only some salaried doctors were publicly reported and no FFS payments were. Publicly reporting only some of the Medicare payments to some of the doctors is incomplete reporting and could be misleading to readers.
- 2.16 In order for the Department to demonstrate proper accountability for over half of a billion dollars in annual spending, we believe the distribution of this spending should be publicly reported and subject to public scrutiny. Even if change to legislation is required, the Department should publicly report total remuneration for each doctor, regardless of whether the doctor is paid via FFS claims, salary, sessional or alternative payment arrangements. (This would be similar to other government reporting of employee compensation and vendor payments.) And to provide better accountability, the Department should publicly report annually summary-level information on doctor remuneration, such as: total payments for each remuneration method (FFS, salary, sessional, other – Exhibit 2.4), doctor remuneration by dollar range (Exhibit 2.7), doctor remuneration by specialty (Exhibit 2.8), etc.

2.17 The audit function has several strengths which include the following:

- There is appropriate authority for auditing that is clearly documented and communicated to doctors.
- Resources are assigned to the audit function. New staff receive on-the-job training.
- A documented audit plan guides the unit's work.
 The annual work plan incorporates the audit plan.
 The audit unit issues a quarterly report to the Director.
- Documented policies and procedures guide the audit unit.

- **2.18** We believe the existence of an audit unit within the Medicare program is positive and very appropriate given the magnitude and complexity of the program. The strengths of the existing audit function provide a good foundation to build upon.
- **2.19** *The audit function has several significant weaknesses* which include the following:
 - *There is limited audit coverage* of Medicare payments.
 - Not all high earners are reviewed or audited. We believe the Department should identify doctors with high Medicare earnings and doctors with earnings significantly higher than their specialty average; their earnings should be reviewed to determine reasonableness and audited if suspect.
 - Recoveries of inappropriate payments are low. The average annual recoveries for the ten-year period fiscals 2002 to 2011 were \$72,581. The recoveries identified by the audit unit ranged from \$4,492 in fiscal 2009 to \$312,143 in fiscal 2011.
 - For 2011, audit recoveries of \$312,143 are negligible when compared to the Medicare expenditures of \$553 million. The *Medicare Audit Plan 2012-2013* projects recoveries of \$3.21 million (excluding WSNB [WorkSafeNB] recoveries); the plan is based on an audit team of five.
 - We identified inefficiencies regarding the selection of audit projects, the time frame for recoveries, the organization of electronic information and the time consumed by auditors doing administrative tasks.
 - We believe the Department should train staff and identify / develop exception reports as needed in order to implement a risk-based audit approach.
 - Revisions to legitimate audit recoveries
 undermines audit's credibility. (Sometimes the
 recoveries identified by audit were not collected,
 and sometimes recoveries that had been collected
 from doctors were repaid.)
 - We believe there should be documented procedures for authorizing, processing, recording and reviewing the reversal / repayment of recoveries. Also there should be a log of recovery reversals / returns to allow them to be easily tracked and reported.

- There is limited performance reporting of the audit function. In our opinion, the Department should publicly report the actual performance of its audit unit in comparison with targeted recoveries and provide a rationale for any variances. Such performance information should be included in the Department's annual report.
- 2.20 Recoveries of inappropriate Medicare payments relating to WorkSafeNB (WSNB) claims are significant. "WSNB recoveries" is the term we use for improper Medicare payments for services (for work-related injuries covered by a WSNB claim), which are recovered from doctors. Information provided by the Department showed in fiscal 2009, Medicare recoveries relating to WSNB claims were over half of a million dollars (\$503,025) and in fiscal 2006 and fiscal 2010, recoveries were over \$400,000.
- **2.21** Other observations regarding Medicare payments relating to WSNB claims include the following:
 - The current process for identifying WSNB recoveries is inefficient because it is a quarterly manual review by the audit unit of approximately 25,000 pages of information. We discussed the inefficiencies with staff of the Department and management agreed they should review the process for identifying and recovering amounts related to WSNB claims and implement changes to improve the process.
 - Some doctors bill both Medicare and WSNB for the same service. We believe billing two parties for the same service is inappropriate. We believe the Department should take immediate corrective action which prohibits doctors from billing two parties for the same service.
- 2.22 The Department's enforcement of doctor compliance with legislation and Departmental policies needs strengthening. Legislation and policies establish the rules for programs; monitoring and auditing measures compliance with the rules; and, enforcement ensures compliance with the rules. We found enforcement was lacking in the following ways:
 - The Department does not have an enforcement policy for Medicare. Also, the Department does not have documented procedures regarding

- enforcement.
- We identified situations where the Department's enforcement action with doctors is lacking.
- There are no ramifications for over-charging Medicare. While the Act authorizes the Department to revoke a doctor's billing privileges, the Department informed us they have never done this as an enforcement action. The Department does not use penalties such as charging interest or issuing fines.
- 2.23 We believe the Department should enforce existing legislation that allows for a progressive range of sanctions which could deter a doctor from wrongfully billing. There should be consequences when a doctor repeatedly submits inappropriate claims.
 Consequences such as fines, penalties and / or charging interest on overpayments may deter inappropriate claims. Also, staff need clearly documented procedures to allow them to perform enforcement actions confidently with no risk of interference.
- 2.24 The Professional Review Committee (PRC) is active. The PRC was established in 1972 to protect the interests of the public, the profession and the government in the operation of Medicare. The PRC is required by legislation and has significant authority. It consists of five doctors nominated by the New Brunswick Medical Society and appointed by the Minister. We found the PRC has documented Terms of Reference and a history of being active. The committee met between two and six times per year during the twelve years from 2000 to 2011.
- **2.25** Other observations regarding the PRC include the following:
 - The PRC has opportunity to enhance its value. We believe the PRC has an opportunity to expand its value to the Department by reviewing analyses of Medicare billings and providing comments to the audit unit. As indicated by the Act, this review may identify areas where inappropriate or unneeded services have been claimed and / or misuse of the fee schedule. Both could result in recoveries, either directly or indirectly via a recommendation for an audit. Given the PRC needs only to meet approximately five times per year to review audit

cases, other monthly meetings could be held to review and analyze patterns of billing.

We discussed this with members of the PRC who were very receptive to the opportunity to expand its value to the Department by reviewing billing patterns and making recommendations regarding possible misuse of the fee schedule.

- The PRC does not report annually to the Minister as required according to their Terms of Reference and their Orientation Manual.
- **2.26** *Medicare FFS payments to doctors* FFS payments to doctors were over \$351 million in 2011, which represented 64% of total Medicare expenditures. The Department reported there were 1,060 FFS doctors in their 2010-2011 Annual Report.
- **2.27** *FFS payments to many doctors appear high when compared to budget estimates.* Information provided by the Department for 2011 showed the following:
 - There were 13 doctors who received FFS payments in excess of \$1 million each.
 - There were 145 doctors who received FFS payments in excess of \$500,000 each.
 - There were 409 doctors (25%) who received FFS payments in excess of \$300,000. Note if the doctors receiving Medicare payments less than \$100,000 were excluded (part-time or part-year doctors), this would increase to 47%.
- 2.28 Medicare payments to radiologists Radiologists are doctors who use diagnostic imaging (X-rays, etc.) to diagnose conditions and treat patients. Although their remuneration is funded under the FFS agreement, the payment process differs from other FFS doctors. Radiologists are paid by the Regional Health Authority (RHA) for which they work. The RHA then bills Medicare to recover these payments. In 2011, total payments to radiologists were approximately \$45 million.
- **2.29** Total payments to some radiologists appear high when compared to other specialties. Information provided by the Department for 2011 showed the following:
 - There were 68 regularly paid radiologists.

- There were five radiologists who were paid more than a million dollars each.
- The radiologist with the highest Medicare remuneration was paid \$1,430,121. The same radiologist was paid \$6.3 million over five fiscal years.
- There were 45 radiologists (66%) who were paid more than half a million dollars each.
- The median for one zone was \$821,863, which means four of the nine radiologists in the zone received payments in excess of \$821,863 and four of the nine radiologists in the zone received payments less than \$821,863.

Department staff agreed that payments to radiologists appear high when compared to other specialties.

- **2.30** Other observations regarding radiologists include the following:
 - Most claims submitted for radiologists are not subject to regular payment controls. The Department's 1998 radiology project to automate billings is slow moving.
 - The Department does not recover Medicare costs relating to radiology as important claim information is not available in the Department.
 - *There is no monitoring* of radiologist remuneration by the Department.
 - *Current radiology claims do not comply* with the *Physician's Manual* and regulations.
- 2.31 Current radiologist billing practices have significant risks and may lead to the loss of considerable recoveries of incorrect payments. We believe radiologists should be required to bill through the automated Medicare system like all other FFS doctors. The lack of information, controls, monitoring and auditing regarding radiologist payments requires immediate action.
- **2.32** *Medicare payments to salaried doctors* Salary payments to doctors were over \$109 million in 2011, which represented 20% of total Medicare expenditures. The Department reported there were 489 salaried doctors in their 2010-2011 Annual Report.

- **2.33** Medicare payments to some salaried doctors appear high when compared to the salary scale. Information provided by the Department for 2011 showed the following:
 - There was one doctor who received salary payments in excess of \$1 million.
 - There were 11 doctors who received salary payments in excess of \$500,000 each.
 - There were 136 doctors who received salary payments in excess of \$300,000.
- **2.34** *Other observations regarding salaried doctors* include the following:
 - Contracts are not filed in the Department for all salaried doctors. As of June 2012, the Department had received approximately 84% of the contracts.
 - The shadow-billing requirement is not met by all salaried doctors. While "shadow billing has always been a requirement of salaried physician employment," compliance has not been enforced by the Department. In January 2012, the Department did an analysis and determined 80% of the required doctors were shadow billing.
- 2.35 We believe the Department should develop, document, assign and implement proper monitoring procedures for salaried doctors. Monitoring procedures should include reviewing contracts signed between the RHAs and the doctor to ensure compliance with the MPP. As well, we believe the Department should continue its efforts to monitor compliance with the shadow-billing requirement and take action with those doctors who do not comply.
- 2.36 Medicare sessional payments to doctors relate to designated services paid for on an hourly basis, such as doctors working in emergency rooms and those working part-time in a nursing home or a jail. Sessional-type payments to doctors were approximately \$60 million in 2011, which represented 11% of total Medicare expenditures. Approximately

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² Information provided by the Department – Memo to salaried physicians October 8, 2008.

250 doctors received sessional payments in 2011.

2.37 We found cases of non-compliance with the Policy on Sessional Arrangements and believe the Department should review and monitor the sessional arrangements with doctors to ensure compliance with the policy.

Recommendations

2.38 Our recommendations to the Department are presented along with their responses to each recommendation in Exhibit 2.1.

Conclusion

- **2.39** The objective of our work was: to determine if the Department of Health is maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function. We conclude the Department of Health is not maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function.
- 2.40 While the Department has authority to audit all Medicare payments, only some types of payments to doctors are audited. (A portion of FFS payments is audited. However, FFS payments to radiologists and salary and sessional payments to doctors are not audited.) We found the audit function has several weaknesses, which if addressed would improve the ability of the Department to maximize its recoveries of incorrect Medicare payments to doctors.
- 2.41 In addition to monitoring compliance with legislation, agreements and policies and identifying incorrect payments to recover, a strong audit function serves as a deterrent to doctors inappropriately billing Medicare. We believe there is significant opportunity for the Department to increase audit recoveries and / or achieve program savings. Expanding the audit unit's coverage to include all Medicare payments, using a risk-based audit approach, strengthening monitoring and enforcement, and addressing other issues identified by our review should help the Department achieve substantial program savings.

Exhibit 2.1 – Summary of Recommendations

2.1 Recommendations Relating to Medicare Payments to Doctors

Recommendation

Payments to Doctors

- **2.42** We recommend the Department develop an action plan, with specific steps and timelines, to address the deficiencies identified by our work. The action plan is to include, but not be limited to, the following:
 - Improving the monitoring of doctor remuneration, including all methods of remuneration (Fee-For-Service, salary, sessional), total payments, and the cap and the "on-call group account" for salaried doctors.

Department's Response

The Department has already taken the following measures to improve monitoring of all methods of remuneration:

- The previously named "Medicare Audit Team" was renamed to "Monitoring and Compliance" in the winter of 2012, and the team has been increased to 6 from 3 staff members to encompass monitoring functions.
- The Medicare Services and Physician Remuneration branch hired a staff member in the spring of 2012 to more effectively monitor the cap and on-call group accounts for salaried doctors.
- A change request was put forward to add a change to the automated system to allow the on-call stipend claims to come in electronically.

The Department will be taking the following actions to improve monitoring of all methods of remuneration:

- The Medicare Services branch will be revising the monitoring process for the on-call group account for salaried physicians.
- A change to the automated system to allow on-call stipend claims to come in electronically will be effective in the spring 2013.
- A reporting mechanism to monitor total payments to doctors on a quarterly basis will be implemented in 2013/2014.
- The Monitoring and Compliance unit will be incorporating the monitoring of all methods of remuneration as part of their annual planning process.

Exhibit 2.1 – Summary of Recommendations (continued)

2.1 | Recommendations Relating to Medicare Payments to Doctors (continued)

Recommendation

Improving the audit function by: expanding
the audit coverage to include all Medicare
payments; using a risk-based audit approach;
ensuring the audit unit has the skill set and
information needed; documenting procedures
for authorizing, processing, recording and
reviewing the reversal / repayment of
recoveries; publicly reporting the actual
performance of its audit function in
comparison with targeted recoveries and
providing a rationale for any variances;
expanding the use of the Professional Review
Committee, etc.

Department's Response

The Department has already taken the following measures to improve audit coverage and process:

- The Monitoring and Compliance unit responsible for audits has been increased to 6 from 3 staff members to encompass increase the breadth of audit functions.
- A process was put in place in the winter of 2012 for the Department to receive all salary remunerated doctor's contracts to allow for audit of salaried physicians.

The Department will be taking the following actions to improve audit coverage and process:

- All specialties that have service codes are required to shadow-bill their services, of these salaried physicians, 96% of them are shadow billing. With this data, the Monitoring and Compliance unit are now in a position to audit these accounts. These will be incorporated in the team's annual planning process for fiscal 2013/2014.
- In April 2013, the Department will be making it mandatory for all sessional remunerated physician's to provide appropriate backup for the Billing of sessional hours. The Department will also be enforcing time of day to be captured on claims to support this billing. These will be incorporated in the team's annual planning process for fiscal 2013/2014.
- The Monitoring and Compliance unit will be enhancing their monitoring tools with exception reports to allow for a more risk based audit approach. This will include using software and skillset currently available within the Department. This process has already been initiated.
- The Monitoring and Compliance unit will be enhancing the documented procedures and job steps to include more robust recording of all audit and monitoring projects, payments and recoveries.
- The 2012/1013 annual report will include reporting of the Monitoring and Compliance team's performance results.
- The role of the PRC (Peer Review Committee) will be revisited and expanded as required.

The Department has developed accountability benchmarks for family physicians, pediatricians and psychiatrists. It will continue to develop benchmarks for the remaining specialties in the coming months.

Exhibit 2.1 – Summary of Recommendations (continued)

2.1	Recommendations Relating to Medicare Payments to Doctors (continued)		
Recom	ecommendation Department's Response		
	Improving the Department's enforcement of doctor compliance with legislation and departmental policies by establishing an enforcement policy and implementing ramifications for doctors who do not comply, such as those who over-charge, double bill for services relating to workplace injuries and those who do not shadow-bill.	The Regional Health Authorities have implemented a progressive discipline process for the salaried physicians who refuse to shadow bill. This has resulted in an increase from 35% to 96% of salaried physicians shadow billing in the last two years. This percentage is based the specialties that have service codes as they are required to shadow-bill their services. The Department is willing to explore options to improve enforcement of compliance with legislation and policies, and implement ramifications in cases of non-compliance.	
	Ensuring claims submitted for radiology services comply with legislation and payments for those services are subject to the same payment controls, monitoring and auditing as other Fee-For-Service payments	The Department has a Radiology billing initiative underway to automate billing by radiologists similar to other FFS physicians. Target implementation date is April 2013. In addition, there is a committee in place reviewing service codes and rules. Target completion of this work is summer 2013.	
	Improving and automating the process of recovering Medicare payments relating to WorkSafeNB claims.	The Department has attempted over the years to improve the process currently in place to recover payments related to work safe injuries. Although data is provided to the Department, it is not standardized, nor consistent with Medicare billing data and requires extensive person hours to match the claims and effect the proper due diligence to determine if claims were billed to both WSNB and Medicare.	
		Medicare has recently created a reporting mechanism to identify physicians who have and continue to bill services to both agencies and will be sending reminder letters to physicians informing them that they are non-compliant with legislation.	
		In addition, the Department will continue to work with WSNB to find a better reporting mechanism for work safe related claims.	

Exhibit 2.1 – Summary of Recommendations (continued)

2.1	2.1 Recommendations Relating to Medicare Payments to Doctors (continued)		
Recommendations		Department's Response	
Publi	cly Reporting Doctor Remuneration		
p	Similar to other government reporting of employee compensation and vendor ayments, and to provide better accountability, we recommend the Department publicly report total remuneration for each doctor, regardless of whether the doctor is raid via Fee-For-Service, salary, sessional or alternative payment arrangements.	The Department will work with the Office of the Auditor General and the Privacy Commissioner to develop the legislation and privacy requirements.	
a fo	To provide better accountability, we recommend the Department publicly report innually summary-level information on doctor remuneration, such as: total payments or each remuneration method (Fee-For-Service, salary, sessional, other), doctor remuneration by dollar range, doctor remuneration by specialty, etc.	The Department will publish summary level information on doctor remuneration in the 2011/2012 annual report.	

Background on the Medicare Program

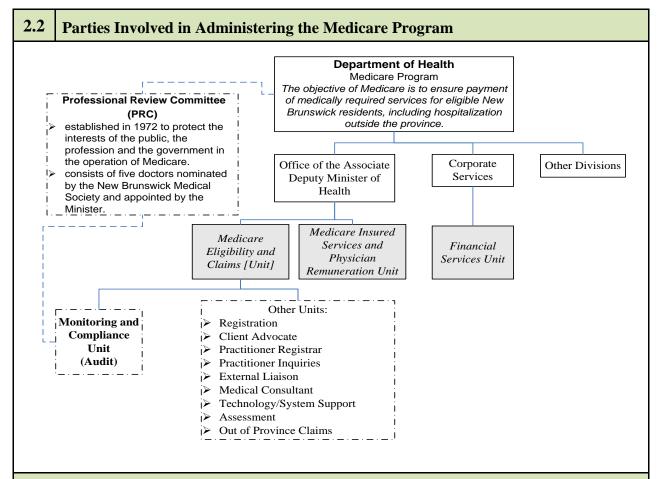
Medicare program – objective & delivery

- 2.45 The Department of Health (Department) is responsible for the Medicare program (Medicare) under the Medical Services Payment Act (Act). "The objective of Medicare is to ensure payment of medically required services for eligible New Brunswick residents, including hospitalization outside the province." 3
- **2.46** Exhibit 2.2 shows the parties involved in administering Medicare. Within the Department, the Office of the Associate Deputy Minister of Health is responsible for Medicare. There are three units within the Department that are directly involved with delivering the program, which are shaded in Exhibit 2.2.
- 2.47 The Medicare program is complex. There are areas in this chapter where details have intentionally been omitted for the purpose of simplicity. For example, the number of doctors in New Brunswick may seem like a straight-forward concept. However, the number is dynamic as there is constant movement with doctors leaving the Province, new doctors entering the Medicare program, and others retiring. The number of doctors working during a time period can be different from the number of doctors paid during the same period because of the timing of submitting claims (doctors have 92 days to bill Medicare), the payment periods (every two weeks) and retroactive payments.

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³ Province of New Brunswick, 2010-2011 Annual Report - Department of Health, September 2011, page 83.

Exhibit 2.2 - Parties Involved in Administering the Medicare Program

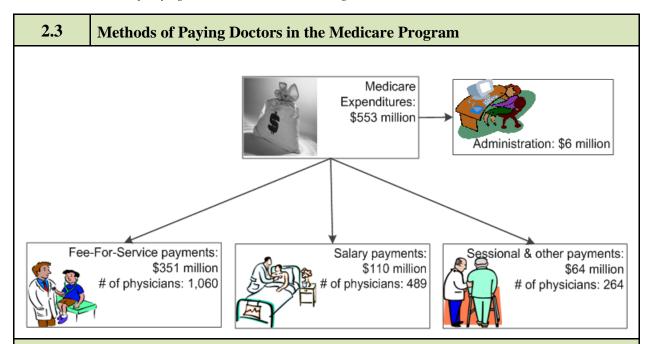


Notes:

- 1. "Medicare Eligibility and Claims [Unit] is responsible for the eligibility and registration of New Brunswick [residents] for Medicare coverage, the registering of physicians, liaising with physicians as well as processing and, when applicable, payment of in and out-of-country claims. Medicare Eligibility and Claims also audits physician's billings to ensure these are billed according to legislation and the Fee-For-Service agreement. The unit also manages an advocacy service informing New Brunswick residents of their rights when dealing with Medicare."
- 2. "Medicare Insured Services and Physician Remuneration Unit is responsible for policy development, project management, provision of expert guidance on corporate and health policy issues and appeals regarding Medicare coverage. The unit is responsible for physician remuneration" This includes negotiating the Fee for Service Master Agreement with the New Brunswick Medical Society (NBMS) and being accountable for and involved in the formal consultative process with NBMS and the Department of Human Resources for the Medical Pay Plan for salaried doctors.
- 3. *The Financial Services Unit* is responsible for manual payments within Medicare.

Source: Chart created by the Office of the Auditor General. The responsibilities of the units are quoted from the 2010-2011 Annual Report - Department of Health, September 2011, page 83.

Exhibit 2.3 - Methods of Paying Doctors in the Medicare Program



Notes:

- 1. **Fee-For-Service** (FFS) payment is based on the number and types of services provided.⁴ A claim is submitted to Medicare for payment relating to each service performed by the doctor. Most FFS doctors work from their office or in after-hours clinics.
- 2. **Salary** a fixed remuneration according to the Medical Pay Plan⁵ (MPP), which is the provincial agreement with the New Brunswick Medical Society. Typically a doctor would have a contract with the Regional Health Authority for the area in which they work. Most salary doctors work in a hospital.
- 3. **Sessional** Services rendered by practitioners are paid for on an hourly basis for designated services. Doctors working in emergency rooms, or working part-time in a nursing home or a jail are paid under a sessional arrangement.
- 4. Expenditure figures in this diagram represent information related to fiscal 2011. Excluded from the diagram are expenditures of \$14 million relating to alternate funding plans and \$8 million relating to incentive allowances.

Source: Chart created by the Office of the Auditor General.

Doctor remuneration

2.48 Exhibit 2.3 provides an overview of the different methods of paying doctors in the Medicare program (FFS, salary and sessional). It shows estimates of the number of doctors and the total Medicare dollars involved with each of the payment methods.

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⁴ Department website: www.gnb.ca/0394/prw/Remuneration-e.asp#SFFS

⁵ Ibid.

⁶ Ibid.

Exhibit 2.4 - Medicare Expenditures (3 fiscal years)

2.4 Medicare Expend	itures (3 fiscal years)		
Expenditure type	2010-11	2009-10	2008-09
Fee-For-Service	\$ 351,508,711	\$ 347,055,854	\$ 333,729,380
Salaried Doctors	109,622,799	99,611,334	89,608,833
Sessional Fees	63,518,368	58,148,115	55,519,021
Alternate Funding Plans	14,291,050	12,656,605	3,073,200
Incentive Allowances	7,966,999	7,094,219	8,256,866
Administration	6,341,736	6,119,743	6,263,075
Total	\$ 553,249,663	\$ 530,685,870	\$ 496,450,375

Notes:

1. Expenditure type is the high-level classification used by the Department to categorize payments made from Medicare funding.

Source: Table created by the Office of the Auditor General with information from Province of New Brunswick Oracle Financial Information System - Account Analysis Report - Fiscal 2009, Fiscal 2010, Fiscal 2011.

Medicare represents one of government's highest cost programs with consistent growth.

2.49 Medicare expenditures in 2011 were slightly more than half of a billion dollars (\$553.3 million⁷). This represented 22.3% ⁸ of the Department's expenditures, which were approximately \$2.5 billion⁹. Medicare represents one of the government's highest cost programs. Exhibit 2.4 shows Medicare expenditures for three fiscal years: 2009, 2010 and 2011. It shows Medicare expenditures increased by \$34.2 million (6.9%) in fiscal 2009-10 and increased by \$22.6 million (4.3%) in fiscal 2010-11.

Monitoring and Compliance Unit (Medicare Practitioner Audit)

2.50 During the course of our work, the *Medicare* Practitioner Audit unit was renamed as Monitoring and Compliance. The mission of the unit is, "Monitor Medicare expenditures through

⁷ Province of New Brunswick, 2010-2011 Annual Report - Department of Health, September 2011, page 95.

⁸ Ibid.

⁹ Ibid.

of changes, to ensure physicians comply with Medicare's rules and regulations." The goal of the unit is, "To reduce the number of inappropriate billing/fraudulent activity". Additional information on the monitoring and compliance unit is provided in Appendix 2.

investigation, education and / or recommendation

Introduction to Findings

What we examined and the objective of our work

- 2.51 The objective of our work was: to determine if the Department of Health is maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function.
- **2.52** We developed five criteria to use as the basis for our work. The criteria are shown in Appendix 3.
- **2.53** In completing our work, we focused on Medicare payments and audit recoveries for the fiscal year ended March 31, 2011. We performed the following procedures.
 - We reviewed legislation and policies for Medicare.
 - We held discussions with staff from each of the three units involved with Medicare, including the Medical Consultant for the program.
 - We met with members of the Professional Review Committee (PRC).
 - We examined operating procedures.
 - We shadowed auditors doing an on-site visit to a doctor's office to retrieve information.
 - We analyzed payments to doctors and explored unusually high amounts.
 - We provided the Department with a sample of doctors with high salary payments and a list of doctors with high sessional payments and asked for explanations.
 - We selected a sample of doctors with high oncall payments and asked the Department for

¹⁰ Information provided by the Department - Audit routine procedure May 2010 for PRC.

¹¹ Ibid.

explanations.

• We performed other procedures as determined necessary.

How we present our findings

2.54 Our main findings are reported in sections. The first section presents our findings on the audit and enforcement functions. Since we found the audit coverage of payments to doctors is incomplete, we are reporting observations on the different types of payments to doctors (FFS, salary and sessional) in a second section. We also discuss public reporting of doctor remuneration in the second section titled, *Doctor Remuneration and Public Reporting*. See Exhibit 2.5.

Exhibit 2.5 - Presentation of Our Findings

2.5	Presentation of Our Findings		
	Finding	Highlights	Details
Au	dit and Enforcement Functions		
✓	The audit function has several strengths.	Page 31	Page 45
!	The audit function has several significant weaknesses.	Page 32	Page 48
!	There are problems with identifying inappropriate doctor billings for workplace injuries.	Page 33	Page 64
!	The Department's enforcement of doctor compliance with legislation and Departmental policies needs strengthening.	Page 35	Page 68
•	The Professional Review Committee (PRC) is active and has opportunity to enhance its value.	Page 36	Page 70
Do	ctor Remuneration and Public Reporting		
!	Fee-for-service payments need more monitoring.	Page 37	Page 75
!	Radiologist payments need better controls and monitoring.	Page 38	Page 83
!	Salary payments to some doctors appear high when compared to the salary scale.	Page 39	Page 89
!	Sessional amounts paid to some doctors appear high when compared to the policy.	Page 40	Page 94
!	Public reporting of doctor remuneration is incomplete and misleading.	Page 41	Page 97

Key used in this chapter

- **2.55** The following key is used to classify our summary findings:
 - ✓ represents a positive observation
 - ! represents an area needing improvement or further consideration
 - represents other observations.

Terms used in this chapter

2.56 Appendix 1 provides a list of terms, which are frequently used in this chapter, along with their definitions.

Fiscal year 2011 and cashbasis analysis of doctor remuneration

2.57 Figures presented in this chapter relate to the 2010-2011 fiscal year (2011), unless otherwise indicated. Most figures used during our work were provided by the Department. Doctor remuneration figures for 2011 are shown on a cash basis.

Highlights: Audit and Enforcement Functions

Key Finding: The Audit Function has Several Strengths.

Background¹²

- 2.58 The monitoring and compliance unit (formerly the "Medicare practitioner audit" unit) performs the audit function. It has been in operation since April 1990. The role of this unit is to monitor and review the billing patterns of medical practitioners. Appendix 2 provides general information on the unit.
- **2.59** A specific audit or review project may involve a particular billing code(s), an individual doctor or a selected specialty (a group of doctors, an example being pediatrics). Based on audit findings, one or more of the following actions may be taken:
 - provision of educational advice to doctors;
 - referral of the matter to the Professional Review Committee, legal authorities or the College of Physicians and Surgeons of New Brunswick; and
 - recovery of funds.

Summary of Findings

- **2.60** We found the following:
 - ✓ There is appropriate authority for auditing that is clearly documented and communicated to doctors.
 - ✓ Resources are assigned to the audit function.
 - ✓ New staff receive on-the-job training.
 - ✓ A documented audit plan guides the unit's work.
 - ✓ The annual work plan incorporates the audit plan.
 - ✓ The audit unit issues a quarterly report to the Director.
 - ✓ Documented policies and procedures guide the audit unit.
- **2.61** For more detailed discussion of these findings please see Appendix 4.

¹² Paraphrased from information provided by the Department

Key Finding: The Audit Function has Several Significant Weaknesses.

Background

- **2.62** A strong audit function can yield significant program savings. The audit function may:
 - serve as a deterrent to doctors inappropriately billing Medicare;
 - identify incorrect payments to recover;
 - monitor compliance with legislation, agreements and policies; and
 - help educate doctors and their office staff on proper billing practices.

Summary of Findings

2.63 We found the following:

- ! Only 53% of Medicare payments have been in the audited population.
- ! Not all high earners are reviewed or audited.
- ! Recoveries of inappropriate payments are low.
- ! Reversing recoveries undermines the audit unit's credibility.
- ! We identified inefficiencies in the audit unit's processes.
- ! There is limited performance reporting relating to the audit function.
- **2.64** For more detailed discussion of these findings please see Appendix 5.

Key Finding: There are Problems with Identifying Inappropriate Doctor Billings for Workplace Injuries.

Background

- 2.65 Several years ago, Medicare staff observed Medicare paying high volumes of claims for "work-related injuries", which under the correct submission by the doctor, should in fact have been billed to and paid by WorkSafeNB (WSNB)¹³. Claims paid by WSNB are funded through insurance premiums paid by businesses, whereas claims paid by Medicare are funded by the taxpayer. In 1992, our Office recommended the Department and WSNB develop a procedure to recover claims billed to both the WSNB and Medicare.¹⁴
- 2.66 WSNB now provides the Department with information on claims paid. Medicare staff review Medicare payments to determine if any relate to services for work-related injuries. "WSNB recoveries" is the term we use for improper Medicare payments regarding work-related injuries which are recovered from doctors. (It is an improper Medicare payment because the doctor's service was for a work-related injury covered by a WSNB claim, and was either billed to both WSNB and Medicare or billed to Medicare when it should have been billed to WSNB.)

Summary of Findings

2.67 We found the following:

- Recoveries relating to WSNB claims are significant.
- ! Some doctors bill both Medicare and WSNB for the same service.
- ! Some salaried doctors get paid twice for WSNB related services they provide.
- ! The current process for identifying WSNB recoveries is inefficient.
- ✓ There are documented procedures for WSNB

¹³ WorkSafeNB (WSNB), formerly Workplace Health Safety and Compensation Commission and Workers Compensation Board (WCB).

¹⁴ Paraphrased from information provided by the Department.

recoveries.

- The WSNB recoveries are currently the audit team's responsibility.
- **2.68** For more detailed discussion of these findings please see Appendix 6.

Key Finding: The Department's Enforcement of Doctor Compliance with Legislation and Departmental Policies Needs Strengthening.

Background

- **2.69** Legislation and policies establish rules for programs. Monitoring and auditing measures compliance with rules and identifies cases of non-compliance. Enforcement ensures compliance with rules.
- **2.70** The Act and regulations provide authority to the Department to recover overpayments and "*revoke*, *suspend or cancel*" a doctor's ability to participate in the Medicare program.
- 2.71 The Act also lists offences. Section 11(1) states, "A person who violates or fails to comply with any provision of the regulations commits an offence punishable under Part II of the Provincial Offences Procedure Act as a category B offence." Section 11(2) makes a similar statement with regards to the Act, and section 11(3) states, "A medical practitioner, an oral and maxillofacial surgeon or other person providing entitled services who wilfully makes a false statement in any report, form or return required for the purposes of this Act or the regulations commits an offence punishable under Part II of the Provincial Offences Procedure Act as a category I offence."

Summary of Findings

- **2.72** We found the following:
 - ! The Department does not have an enforcement policy.
 - ! We identified situations where the Department's enforcement of doctor compliance with legislation and Departmental policies needs strengthening.
 - ! There are no ramifications for over-charging Medicare.
- **2.73** For more detailed discussion of these findings please see Appendix 7.

Key Finding: The Professional Review Committee (PRC) is Active and has Opportunity to Enhance its Value.

Background

- 2.74 The Professional Review Committee (PRC) was established in 1972 to protect the interests of the public, the profession and the government in the operation of Medicare. It consists of five doctors nominated by the New Brunswick Medical Society and appointed by the Minister. A member is generally appointed for a term of three years and may be re-appointed for any number of terms. The PRC provides:
 - support and / or recommendations to Medicare;
 - experienced professional counsel to any doctor whose pattern of practice appears not to be in the best interests of the public or the medical profession; and
 - opportunity to doctors to present their situation to the committee.¹⁵

Summary of Findings

- **2.75** We found the following:
 - The PRC is required by legislation and has significant authority.
 - ✓ The PRC has documented *Terms of Reference*.
 - ✓ The PRC has a history of being active.
 - The PRC does not meet regularly.
 - PRC has opportunity to expand its value.
 - ! The PRC does not report annually.
- **2.76** For more detailed discussion of these findings please see Appendix 8.

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¹⁵ Paraphrased using information provided by the Department.

Highlights: Doctor Remuneration and Public Reporting

Key Finding: Fee-For-Service Payments Need More Monitoring.

Background

- 2.77 Medicare FFS payments are based on the number and types of services provided. A claim is submitted to Medicare for payment relating to each service performed by the doctor. Most FFS doctors work from their office or in after-hours clinics. The following facts relate to FFS payments in 2011:
 - FFS payments were over \$351 million and represented 64% of total Medicare expenditures.
 - Over 1,600 doctors received FFS payments. Most were full-time FFS doctors. The Department reported 1,060 FFS doctors in their 2010-2011 Annual Report. However, salaried doctors also have a FFS account for services they provide outside normal working hours.
- 2.78 The FFS payment system is based upon the honour system. The onus is on the doctor to accurately submit FFS claims. It is not practical for Medicare to confirm that patients received services from doctors prior to paying claims. Inherent in any such system is a risk of incorrect or inappropriate claims. This inherent risk can be mitigated via payment controls, consistent monitoring and audit.

Summary of Findings

2.79 We found the following:

- FFS payments to many doctors appear high when compared to budget estimates.
- ! There is limited monitoring of FFS payments.
- ! Monitoring of the FFS cap for salaried doctors is inadequate.
- ! There is no monitoring of the "on-call group account" for salaried doctors.
- ! The use of a wrong account may cause overpayment.
- ! Radiologist payments need better controls and monitoring. (This is reported as a separate finding in the next section.)
- **2.80** For more detailed discussion of these findings please see Appendix 9.

Key Finding: Radiologist Payments Need Better Controls and Monitoring.

Background

2.81 Radiologists are doctors who use diagnostic imaging (X-rays, etc.) to diagnose conditions and treat patients. Although their remuneration is funded under the FFS agreement, the payment process differs from other FFS doctors. Radiologists are paid by the RHA for which they work. The RHA then bills Medicare to recover these payments. In 2011, total payments to radiologists were around \$45 million.

Summary of Findings

2.82 We found the following:

- Total payments to some radiologists appear high when compared to other specialties.
- ! Claims submitted for radiologists are not subject to regular payment controls.
- ! The Department does not recover Medicare costs relating to radiology as important claim information is not available in the Department.
- ! There is no monitoring of radiologist remuneration by the Department.
- ! Current radiology claims do not comply with the *Physician's Manual* and regulations.
- ! The Department's radiology project to automate billings is slow moving.
- **2.83** For more detailed discussion of these findings please see Appendix 10.

Key Finding: Salary Payments to Some Doctors Appear High when Compared to the Salary Scale.

Background

- **2.84** Medicare payments to salaried doctors relate to a fixed remuneration according to the Medical Pay Plan. ¹⁶ Typically a doctor would have a contract with the RHA for the area in which they work. Most salary doctors work in a hospital. The following facts relate to salary payments in 2011:
 - Salary payments were over \$109 million and represented 20% of total Medicare expenditures.
 - The Department reported there were 489 salaried doctors in their 2010-2011 Annual Report.

Summary of Findings

2.85 We found the following:

- Salary payments to some doctors appear high when compared to the salary scale.
- ! Contracts are not filed in the Department for all salaried doctors.
- ! The shadow-billing requirement is not met by all salaried doctors.
- ! Monitoring of payments to salaried doctors is lacking.
- ! There are three significant FFS issues involving salaried doctors that were discussed earlier in this report: 1) FFS payments to salaried doctors are not audited regularly; 2) monitoring of the FFS cap for salaried doctors is inadequate; and 3) there is no monitoring of the "on-call group account" for salaried doctors.
- **2.86** For more detailed discussion of these findings please see Appendix 11.

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Department website: www.gnb.ca/0394/prw/Remuneration-e.asp#SFFS

Key Finding: Sessional Amounts Paid to Some Doctors Appear High when Compared to the Policy.

Background

- **2.87** Medicare sessional payments to doctors relate to designated services paid on an hourly basis. For example, doctors working in emergency rooms and those working part-time in a nursing home or a jail are paid under a sessional arrangement. The following facts relate to sessional payments in 2011:
 - Sessional payments were approximately \$60 million and represented approximately 11% of total Medicare expenditures.
 - Approximately 250 doctors received sessional payments.

Summary of Findings

- **2.88** We found the following:
 - Sessional amounts paid to some doctors appear high when compared to the policy.
 - ! There is non-compliance with the *Policy on Sessional Arrangements*.
- **2.89** For more detailed discussion of these findings please see Appendix 12.

Key Finding: Public Reporting of Doctor Remuneration is Incomplete and Misleading.

Background

2.90 Typically, employees for government, Crown Corporations, and other government organizations whose compensation exceeds \$60,000 during a particular calendar year are publicly reported on the internet in the publication "Unaudited Supplementary Employee Lists." "The salary reported includes regular earnings, overtime, personal service contracts and any other employee remuneration." Also, each supplier whose total payments by all government departments exceed \$25,000 during the fiscal year is publicly reported on the internet in the publication "Unaudited Supplementary Supplier Lists".

Summary of Findings

- **2.91** We found the following:
 - ! There is no public reporting of FFS payments to individual doctors.
 - ! Public reporting for salaried doctors is incomplete and misleading.
 - ! There is no public reporting of sessional payments to individual doctors.
- **2.92** For more detailed discussion of these findings please see Appendix 13.

Appendix 1 – Frequently Used Terms

Terms Used in this Chapter

Act is the *Medical Services Payment Act*.

Claim refers to the documentation submitted to Medicare on a service provided by a doctor. A claim contains information such as: the patient's Medicare number, the date of service, a diagnosis, a code representing the service provided, etc.

- A Fee-For-Service (FFS) claim serves as a billing that results in a payment to the doctor.
- **Shadow billing** claims are submitted by salaried doctors and they serve as a record of service provided. This does not prompt a payment.

Department is the Department of Health.

Doctor / physician are terms used interchangeably to mean all healthcare providers paid by the Medicare program, which includes licensed practitioners, dentists and oral maxillofacial surgeons.

Fee-For-Service (FFS) is a type of remuneration where payment is based on the number and types of services provided.

GNB is the government of New Brunswick.

RHAs are the Regional Health Authorities: Horizon Health Network and Vitalité Health Network.

Locum is a replacement doctor performing services for a minimum of three consecutive days. For example, a locum replaces a doctor who is taking a vacation.

Medicare is the term applied to the medical services plan, established under the *Medical Services Payment Act*. The purpose of Medicare is to ensure payment of medically required services for eligible New Brunswick residents.

MPP is the *Medical Pay Plan*, which sets a fixed remuneration for doctors paid a salary. Salary is another type of remuneration for doctors.

Appendix 2 – General Information on the Monitoring and Compliance (Audit) Unit

General Information on the Monitoring and Compliance Unit of Medicare

Mission:

• To monitor Medicare expenditures by ensuring that physicians conform to Medicare's rules and regulations through investigation, education and/or recommendation of changes.

Goal:

• To reduce the number of inappropriate billing / fraudulent activity.

Role:

• To monitor and review billing patterns of practitioners (medical / oral maxillofacial surgeons) either on a random or non-random basis, as required.

Audits:

- Legislative authority for conducting an Audit is provided by the Medical Services Payment Act. The 1994 legislation appointed "inspectors" authority to "full access" to physician billing information. (Section 8.1(1) to (6) of the Medical Services Payment Act).
- Audits are initiated by internal and/or external tips (i.e. practitioner/patient calls/letters; law enforcements agencies), review of profiles and exception reporting.
- A routine audit procedure is followed. This procedure may change according to the specifics of each case.

Ramifications:

- The Department has the right to suspend a practitioner's billing number at the discretion of the Minister. If the practitioner refuses to reimburse the Medicare branch for overpayment, it is forwarded to the Financial Services Branch who is authorized under the Financial Services Act to recuperate any outstanding monies owed to the province. When this process fails or there is unquestionable fraud, the case is sent to the Department of Justice [and Attorney General] for appropriate action.
- The Department has the right to go back 7 years but generally looks at 1 or 2 quarters or up to 2 year periods, then utilizes statistical inference and applies the percentages of inappropriate billings or any over billings for the fiscal period reviewed. This depends on the exact nature and extent of the errors found. No interest or penalties are assessed on over billings discovered, as the Medical Services Payment Act does not provide authority in this area.

Relationships:

- The audit team would have direct relationships/communication with many of the other Medicare teams as well as the Medical Consultant, Medicare Program Support and the Director.
- There would also be a relationship between Audit and Medicare payments in Financial Services, Extra Mural Hospitals, Hospital Services and Administration, the NB Medical Society (NBMS), the Professional Review Committee (PRC), Canadian Medical Protection Association (CMPA), College of Physicians and other similar branches across Canada and most importantly the practitioners themselves.

Source: Information provided by the Department, excerpts from the *Medical Practitioner Audit Overview – updated 2010*.

Appendix 3 – Criteria Used in Our Work

Criteria Used in Our Work

- Criterion #1: The Department should ensure the practitioner audit group has the ability to audit any fee for service payment.
- Criterion #2: The Department should use a risk-based approach to identify work to be done by the practitioner audit group.
- Criterion #3: The Department's practitioner audit group should perform work in accordance with documented procedures.
- Criterion #4: The Department should collect incorrect payments to doctors, identified by the audit group, in accordance with documented procedures.
- Criterion #5: The Department should measure and report the effectiveness of its practitioner audit group.

Appendix 4 – Detailed Findings: The Audit Function has Several Strengths.

There is appropriate authority for auditing that is clearly documented and communicated to doctors.

- 2.93 The authority for auditing is granted through section 8.1(1) of the *Medial Services Payment Act*, which provides the authority to appoint auditors to "*inspect*, examine and audit books, accounts, reports and medical records maintained in offices of [physicians]...". Section 11(2.3) of the regulation supports the audit function by requiring a doctor to permit an audit of his or her books and records, retain documentation for a period of seven years, and submit documentation when requested by Medicare.
- 2.94 Medicare policies also document the authority to audit. *The Policy on Salaried Physicians*, under section C. Roles and Responsibilities states, "Any arrangements regarding a salaried physician must be approved by Medicare and services provided by salaried physicians are subject to reviews by the Audit section of Medicare." Similarly, the *Policy on Sessional Arrangements* under section B. Remuneration states, "All payments are subject to monitoring and audit."
- **2.95** Section 08: Audit of the *Medicare Policy Manual* consists of two policies: Policy 1 *On-Site Audit, Physician's Office* and Policy 2 *The Professional Review Committee.*
- 2.96 In addition to legislation and Medicare policies, the authority to audit is communicated to doctors via documents provided to them. The *Physician's Manual* is provided to each doctor when they are registered with Medicare. It contains a two-page description of "Practitioner Audit" which begins with a statement that "accounts paid by NB Medicare to either doctors or patients are subject to verification". Also, FFS doctors sign a Medicare Teletransmission Agreement, which allows them to electronically submit their claims for payment. Section 7 of the agreement requires the practitioner to permit Medicare or its authorized representatives to audit their records and take extracts or make copies.
- **2.97** These authorities appear to apply equally to FFS, salaried and sessional payments to doctors. Therefore, the Department (through the monitoring and

compliance unit) has the authority to audit all Medicare payments to doctors.

Resources are assigned to the audit function.

2.98 The audit function is resourced to have a maximum of six members. We reviewed documentation indicating that over the ten-year period of fiscal 2002 to 2011, the number of auditor positions varied from a low of two in fiscals 2005 and 2006 to a high of six in fiscal 2004.

New staff receive on-thejob training. 2.99 The audit unit has a documented training plan. New staff receive on-the-job training which enhances their competency and the consistency of audit work performed by the unit. The audit unit holds regular team meetings and the auditors frequently consult with each other when doing their work, both of which also promote consistency.

A documented audit plan guides the unit's work.

- **2.100** Starting in 2011, the audit unit began preparing an annual *Medicare Audit Plan*. At the time of our work, two *Medicare Audit Plans* had been completed, one for fiscal 2012 and a second for fiscal 2013. The *Medicare Audit Plan* guides the unit's work.
- 2.101 We examined the *Medicare Audit Plan 2012-2013* dated March 13, 2012 and discussed it with Department staff. It contained a summary of audit projects (providing a brief description of the project along with the staff assigned to the project), a project schedule (a chart fitting the projects into a calendar), a time table (listing start and end dates for each project), a chart of forecasted recoveries, and a list of assumptions.

The annual work plan incorporates the audit plan.

2.102 The audit unit has a history of preparing an annual team work plan. We reviewed work plans for the past several years. Work plans list job functions along with their objective, timeframe and performance indicators. The annual work plan for 2012 incorporated the *Medicare Audit Plan 2012-2013*. In addition to the audit projects, the work plan contained items relating to training and administration.

The audit unit issues a quarterly report to the Director.

2.103 The audit unit reports to the Director each quarter. Reporting consists of a memo (summarizing key activities for the period such as staffing, progress on projects and Professional Review Committee activity) and a one-page report of audit activities and recoveries (providing statistics such as the number of activities completed during the period, the number of doctors

involved, the number of on-site audits, and dollar recoveries).

Documented policies and procedures guide the audit unit.

- **2.104** Medicare has two policies for audit as previously noted.
- **2.105** The audit unit has "job steps" which provide documented direction and specific procedures for identifying, substantiating, reporting and documenting recoveries. The unit also has templates for letters and standard forms which enhance both efficiency and consistency in their work.
- 2.106 The audit unit's role stops with documenting recoveries. There is proper segregation between identifying and collecting audit recoveries. Audit recoveries are collected by either the assessment unit, who collects the recovery amount by adjusting / reducing future payments to the doctor, or by the financial services unit, who receives a manual cheque from the doctor for the recovery amount.

Summary

2.107 We believe the existence of an audit unit within the Medicare program is positive and very appropriate given the magnitude and complexity of the program. The strengths of the existing audit function provide a good foundation to build upon.

Appendix 5 – Detailed Findings: The Audit Function has Several Significant Weaknesses.

Exhibit 2.6 - Audit Unit's Coverage of Medicare Payments

2.6 Audit Unit's Coverage of Medic	are Payments	
Doctor remuneration category	2010-11 Medicare payments to doctors	Audited?
FFS – doctors (note 4)	\$ 291,725,033	partially
FFS – radiologists (note 5)	42,357,617	no
Salaried doctors	109,622,799	no
Sessional doctors	63,518,368	no
Alternate funding plans	14,291,050	no
Other	31,734,796	no
Total Medicare payments to doctors	\$ 553,249,663	

Notes:

- 1. *Doctor remuneration category* refers to the remuneration category that the Department uses to report Medicare payments.
- 2. **2010-11 Medicare payments to doctors** are the actual payments as recorded in the accounting records of the Province.
- 3. *Audited?* indicates if Medicare payments to doctors in the noted category are audited by the Department.
- 4. *FFS doctors* include all fee-for-service payments from Medicare in 2011 to doctors practicing in all specialties except diagnostic radiology and nuclear medicine.
- 5. *FFS radiologists* include all fee-for-service payments from Medicare in 2011 to doctors practicing diagnostic radiology or nuclear medicine.
- 6. *Salaried doctors* include all payments to all doctors receiving salary as remuneration during the period.
- 7. **Sessional doctors** include all payments to all doctors who have received sessional (hourly) remuneration during the period.
- 8. *Alternate funding plans* include all payments to all doctors who are employed or contracted under an alternate funding plan as defined by the Department and / or Health Authority.
- 9. *Other* includes items such as administration and incentive allowances.

Source: Table created by the Office of the Auditor General with information from <u>Province of New Brunswick Oracle Financial Information System Account Analysis Report</u> –Fiscal 2011.

Only 53% of Medicare payments have been in the audited population.

2.108 Only some types of Medicare payments to doctors are audited. The audit unit's coverage of Medicare payments is shown in Exhibit 2.6. Until recently, the population of payments audited has been limited to the automated FFS payments, which was \$291,725,033 (53% of total Medicare payments to doctors).

- 2.109 FFS payments to salaried doctors are not audited regularly. The New Brunswick Policy on Salaried Physicians states, "Fee-for-service and sessional billings are monitored and subject to audit by the [Department]." While the Department has authority to audit FFS payments to salaried doctors, they currently do not do so regularly. Staff from the Department indicated they are not easily able to audit FFS payments to salaried doctors because they do not have access to the information required to audit, such as copies of the doctors' contracts, complete shadow-billing information, and doctors' working schedules.
- 2.110 The Department provided us with information indicating their intent to collect the required information and commence auditing FFS payments to salaried doctors. The Department is in the process of collecting outstanding doctor contracts from the RHAs, and the Department is insisting upon compliance with the shadow-billing requirement. We also noted the *Medicare Audit Plan 2012-2013* includes a project involving salaried doctors with high payments. The Department will be able to complete this project only once the information is provided.

2.111 Payments to radiologists have never been audited.

The audit unit's work focuses on claims paid by Medicare's automated claims payment system. While most FFS doctors are paid in this manner and hence subject to audit, radiologists are not. The audit unit confirmed they have never audited payments to radiologists. "These physicians are paid via manual FFS mechanism. [The Department] is now looking at a plan to better manage this billing scenario. As it stands now, without on-line data, the Audit (now Monitoring & Compliance) Unit would be unable to effectively review these services billed." 17

2.112 Salary payments to doctors are not audited. The New Brunswick Policy on Salaried Physicians states, "Services provide by salaried physicians are subject to review by the department's Audit section. Salaried physicians must provide shadow billing or history only billing as required by the department." While the

¹⁷ Documented response from the Department – Monitoring & Compliance Unit, May 2012

Department has authority to audit salary payments to doctors, they currently do not do so.

- 2.113 Sessional payments to doctors are not audited. The Department's Policy on Sessional Arrangements states, "All payments are subject to monitoring and audit." The New Brunswick Policy on Salaried Physicians states, "Fee-for-service and sessional billings are monitored and subject to audit by the department." While the Department has authority to audit sessional payments to doctors, they currently do not do so.
- **2.114** We believe although it may be more difficult to audit some types of Medicare payments, given the magnitude of the payments involved, alternate audit methods should be pursued so all types of payments (100%) are included in the audit population.

Exhibit 2.7 - 2010-11 Doctor Remuneration

2.7	2010-11 Doctor Remuneration	ı	
Remunei	ration range	# of doctors	% of total # of doctors
Greater th	nan \$1,000,000	16	0.9%
\$900,001	to 1,000,000	5	0.3%
\$800,001	to 900,000	24	1.3%
\$700,001	to 800,000	31	1.6%
\$600,001	to 700,000	47	2.5%
\$500,001	to 600,000	96	5.1%
\$400,001	to 500,000	216	11.5%
\$300,001	to 400,000	391	20.9%
\$200,001	to 300,000	390	20.8%
\$100,001	to 200,000	256	13.7%
Less than	\$100,000	401	21.4%
Total # o	f doctors	1,873	100.0%

Notes:

- 1. *Remuneration* is the total remuneration paid to doctors under the Medicare program and includes fee-for-service, sessional and salary payments to doctors.
- 2. *Remuneration range* is the range of remuneration selected by OAG for comparison purposes.
- 3. # of doctors refers to the number of doctors that fall into each range.
- 4. **Less than \$100,000** may include doctors working part-time, as locums (replacement doctors), and those working only a portion of the year due to new employment or retirement.
- 5. **Total # of doctors** is the total of all doctors presented in the report.

Source: Table created by the Office of the Auditor General with information provided from the Department – <u>Consolidated Practitioners Cumulative Earnings Report IR3542</u> (unaudited) for the period 2010-11 [IR3542 – CER 2010-2011].

Not all high earners are reviewed or audited.

2.115 Exhibit 2.7 shows doctor remuneration by range for 2011. It indicates the number and the percentage of doctors within each range. It shows the total remuneration paid to doctors under the Medicare program, which includes fee-for-service, sessional and salary payments.

- **2.116** Our observations for 2011 from Exhibit 2.7 include the following:
 - Sixteen doctors were paid over \$1 million each.
 - 219 of 1,873 doctors (12%) were paid more than half a million dollars each.
 - 826 of 1,873 doctors (44%) were paid more than \$300,000. Note if the doctors with remuneration less than \$100,000 (part-time doctors) were excluded, this would increase to 56%.
- **2.117** According to the Department, the following figures were used while budgeting for 2011. "The estimated annual earnings of a general practitioner was \$291,418 and the average annual earnings of a specialist was \$420,977 (this specialty average is the average earnings of all specialties)." Given this, we believe remuneration greater than these figures should be considered high.

Exhibit 2.8 - Doctor Remuneration by Specialty

2.8 Doctor Remunerat	ion by Spe	cialty					
		Doctor	's remune	ration (#	and %)	within \$ 1	ranges:
	# of		50,000		00,000	> \$1,0	_
Specialty	doctors	#	%	#	%	#	%
General Practice	846	416	49%	45	5%	1	0%
Radiology ¹	136	61	45%	47	35%	5	4%
Psychiatry	96	58	60%	3	3%	0	0%
Anesthesia	94	57	61%	0	0%	0	0%
General Surgery	79	39	49%	13	16%	0	0%
Obstetrics/Gynaecology	73	40	55%	6	8%	0	0%
Pediatrics	66	39	59%	4	6%	1	2%
Internal Medicine	62	34	55%	11	18%	0	0%
Orthopedic	50	29	58%	4	8%	0	0%
Anatomical Pathology	34	21	62%	2	6%	0	0%
Ophthalmology	29	23	79%	18	62%	7	24%
Cardiology	27	21	78%	13	48%	1	4%
Otol-Head & Neck Surgery	22	15	68%	4	18%	0	0%
Urology	22	20	91%	6	27%	0	0%
Oncology ²	21	17	81%	4	19%	1	5%
Plastic Surgery	20	12	60%	3	15%	0	0%
General Pathology	18	11	61%	3	17%	0	0%
Neurology	16	12	75%	1	6%	0	0%
Emergency Medicine	13	3	23%	0	0%	0	0%
Dermatology	12	10	83%	4	33%	0	0%
Gastroenterology	12	9	75%	6	50%	0	0%
Nephrology	12	10	83%	5	42%	0	0%
Respirology	12	7	58%	2	17%	0	0%
Physical Medicine	11	10	91%	0	0%	0	0%
Rheumatology	11	7	64%	0	0%	0	0%
Neurosurgery	10	9	90%	9	90%	0	0%
Other ³	69	41	59%	6	9%	0	0%
	1,873	1,031	55%	219	12%	16	1%

Notes:

Remuneration refers to total Medicare payments to a doctor, regardless of payment type.

Specialty refers to a doctor's practice concentration as identified in the Cumulative Earnings Report.

- 1. "Radiology" includes both diagnostic radiology and nuclear medicine.
- 2. "Oncology" includes both radiation oncology and medical oncology.
- 3. "Other" includes all specialties with less than 9 doctors, such as geriatrics.

of doctors refers to the total # of doctors in the report that were included in the specialty.

Doctor's remuneration (# and %) within \$ ranges

"> \$250,000", "> \$500,000", "> \$1,000,000" – refers to the number (#) of doctors in the specialty and the percentage (%) - expressed as a percentage of the total number in the specialty - of doctors whose total Medicare earnings exceeded the specified dollar value.

Source: Table created by the Office of the Auditor General with information provided from the Department - Consolidated Practitioners Cumulative Earnings Report IR3542 (unaudited) for the period 2010-11 [IR3542 – CER 2010-2011].

2.118 Exhibit 2.8 presents doctor remuneration for 2011 by specialty. Specialties are listed according to the number of doctors in each specialty; the specialty having the greatest number of doctors is listed first. Exhibit 2.8 also shows for each specialty the number and percentage of doctors that were paid more than \$250,000, \$500,000 and \$1,000,000.

2.119 Exhibit 2.8 indicates the following:

- There are substantially more doctors specializing in general practice than any other specialty; there were 846 general practitioners paid by Medicare in 2011.
- There were 219 doctors who were paid more than half of a million dollars and this represented 12% of all the doctors receiving payments from Medicare.
- Seven ophthalmologists (24%) were paid over a million dollars during 2011.
- There were only four specialties with no doctors earning more than \$500,000 from Medicare (anesthesia, emergency medicine, physical medicine and rheumatology).

Exhibit 2.9 - 16 Doctors Each Paid More than \$1 Million in Fiscal 2010-2011 (Doctors Listed by their Specialty)

2.9 16 Doctors Each Paid More than \$1 Million in Fiscal 2010-2011 (Doctors Listed by their Specialty)

Specialty	Total remuneration	Specialty average	Remuneration > specialty average
Ophthalmology	\$1,652,786	\$667,516	\$985,270
Radiology	1,430,121	335,155	1,094,966
General Practice	1,364,489	255,623	1,108,866
Ophthalmology	1,342,005	667,516	674,489
Ophthalmology	1,318,853	667,516	651,337
Ophthalmology	1,144,401	667,516	476,885
Radiology	1,125,367	335,155	790,212
Radiology	1,116,342	335,155	781,187
Ophthalmology	1,104,288	667,516	436,772
Oncology	1,077,693	391,200	686,493
Radiology	1,076,198	335,155	741,043
Cardiology	1,075,866	440,493	635,373
Ophthalmology	1,069,452	667,516	401,936
Radiology	1,067,345	335,155	732,190
Ophthalmology	1,039,540	667,516	372,024
Pediatrics	1,036,053	245,088	790,965

Notes:

- 1. **Specialty** refers to a doctor's practice concentration as identified in the Cumulative Earnings Report. *Radiology* refers to a doctor practicing diagnostic radiology or nuclear medicine. *Oncology* refers to a doctor practicing medical oncology or radiation oncology.
- 2. **Total remuneration** is the total payments to a doctor regardless of payment type.
- 3. *Specialty average* is the average of the total payments greater than zero of all doctors in the specialty listed as calculated from the Cumulative Earnings Report.
- 4. **Remuneration** > **specialty average** is the excess of the doctor's total Medicare payments over the specialty average.

Source: Table created by the Office of the Auditor General with information provided from the Department - <u>Consolidated Practitioners Cumulative Earnings Report IR3542</u> (unaudited) for the period 2010-11 [<u>IR3542 - CER 2010-2011</u>].

- **2.120** In 2011, 16 doctors were each paid more than one million dollars under the Medicare program. Exhibit 2.9 lists the 16 highest paid doctors by their specialty, rather than their name. The *Total Remuneration* figures represent the total Medicare payments to the doctors, which includes fee-for-service, sessional and salary payments. Exhibit 2.9 also shows the amount of the doctor's total remuneration over their specialty average.
- **2.121** Regarding the 16 doctors in Exhibit 2.9, our observations include the following:
 - Seven (44%) were practicing ophthalmology, representing approximately 24% of the 29 ophthalmologists listed in the Department's report. The audit unit is currently working on an audit of this specialty. The audit involves all doctors in this specialty and specific codes are being examined.
 - Five (31%) were practicing radiology (diagnostic radiology or nuclear medicine). Payments to the radiology specialty are not monitored by the Department and are not currently auditable. None of these five radiologists have had earnings audited by the Department.
 - Four were practicing pediatrics, cardiology, oncology and general practice respectively. None of these four doctors have had earnings audited recently by the Department. (Payments to two of the four doctors were audited in 2002 and recoveries were made from both doctors.)
- **2.122** For each of the 16 doctors, we compared their total remuneration to the average total remuneration of their specialty; our observations include the following:
 - One doctor, a general practitioner, earned \$1,364,489 which exceeded the specialty average of \$255,623 by \$1,108,866 (434%).
 - Two doctors exceeded their specialty average by 323% and 327%. One was in pediatrics and earned \$1,036,053 which exceeded the specialty average of \$245,088 by \$790,965 (323%). The other was in radiology and earned \$1,430,121 which exceeded the specialty average of \$335,155 by \$1,094,966 (327%).
 - Four other doctors in the radiology specialty

- exceeded their specialty average by over 200%.
- Four other doctors exceeded their specialty average over 100%. Two were in ophthalmology, one in cardiology, and one in oncology.
- Five other doctors exceeded their specialty average by 56% to 100%. All were in the ophthalmology specialty.
- **2.123** We believe the Department should identify doctors with high earnings and doctors with earnings significantly higher than their specialty average; their earnings should be reviewed to determine reasonableness and audited if suspect.

Exhibit 2.10 – Audit Unit's Recoveries over a 10-year Period

2.10 Audit Unit's Recov	eries over a 10-year Period	
Fiscal period	Adjusted recovery	Adjusted recovery / auditor
2010-2011	\$ 312,143	\$ 78,036
2009-2010	109,819	36,606
2008-2009	4,492	1,497
2007-2008	21,539	7,180
2006-2007	15,868	5,289
2005-2006	35,528	17,764
2004-2005	63,877	31,939
2003-2004	65,019	13,004
2002-2003	75,023	25,008
2001-2002	22,504	7,501
Average	\$ 72,581	\$ 20,726

Notes:

- 1. *Fiscal period* is the financial reporting period for GNB (April 1 through March 31).
- 2. *Adjusted recovery* is the amount identified by Medicare from incorrect payments to doctors based on audit work only. It may or may not have been actually collected. Where possible, the gross recoveries were adjusted to reflect actual recoveries only, excluding such items as WorkSafeNB recoveries and projected savings.
- 3. *Adjusted recovery / auditor* is the adjusted recovery amount divided by the number of full-time equivalent positions filled and available for work during the fiscal period as indicated by the Department. Over the 10-year period, the number of auditor positions varied from a low of two in 2004-05 and 2005-06 to a high of six in 2003-04.

Source: Table created by the Office of the Auditor General with information provided by the Department:

- Fiscal Summary of Audit Activities and Recoveries (unaudited): each fiscal period noted above
- Quarterly Summary of Audit Activities and Recoveries (unaudited): each fiscal period noted above.

Recoveries of inappropriate payments are low.

- **2.124** The audit unit's recoveries over the past ten-year period are shown in Exhibit 2.10. (These figures do not include recoveries relating to WSNB, which we report later in Exhibit 2.11.)
- **2.125** In reviewing identified recoveries during the tenyear period, we made the following observations:
 - The recoveries identified by the audit unit ranged

- from \$4,492 in fiscal 2009 to \$312,143 in fiscal 2011. The average annual recoveries for the period were \$72,581, and the average annual recoveries per auditor for the period were \$20,726.
- The number of auditors varied during the period. The calculated average recovery amount per auditor position ranged from \$1,497 in fiscal 2009 to \$78,036 in fiscal 2011. The average recovery amount per auditor position was less than \$8,000 for four years and greater than \$25,000 for four years during the ten-year period.
- The recovery amounts reported by the audit unit are the amounts identified as incorrect payments to doctors, and may or may not have been actually collected. Recovery amounts that were collected and then later reversed (and the money given back to the doctor) are also included in the amounts reported. Therefore actual net financial recoveries are typically less than those shown in Exhibit 2.10.
- Staff from the Department told us that for a period involving fiscals 2009 and 2010, the Department ceased all auditing due to a legal opinion advising such action until a formal appeals process could be created. This provides an explanation for the low recovery figure in fiscal 2009.
- **2.126** We believe the recovery amounts are low, given Medicare expenditures for 2011 were over half of a billion dollars. For 2011, audit recoveries of \$312,143 are negligible when compared to the Medicare expenditures of \$553 million. The *Medicare Audit Plan 2012-2013* projects recoveries of \$3.21 million (excluding WSNB recoveries); the plan is based on an audit team of five.
- 2.127 In addition to monitoring compliance with legislation, agreements and policies and identifying incorrect payments to recover, a strong audit function serves as a deterrent to doctors inappropriately billing Medicare. We believe there is an opportunity for the Department to increase audit recoveries and / or achieve program savings. Expanding the audit unit's coverage to include all Medicare payments, using a risk-based audit approach, and addressing the issues identified by our review should help the Department achieve some of these program savings.

Reversing recoveries undermines the audit unit's credibility.

- **2.128** Recoveries identified by the audit unit are substantiated and well documented. Therefore, we were surprised to find that sometimes the recoveries identified were not collected. Further, in some cases recoveries initially collected were subsequently repaid to doctors.
- **2.129** In reviewing reversed and returned recoveries, we made the following observations:
 - Documentation supporting non-collection or return of recoveries already collected is inadequate. Also, there are no documented procedures regarding the authorization needed or the process to follow in reversing or returning recoveries.
 - Reversed / returned recoveries are not tracked.
 - Audit recoveries are overstated in management reports because reversed recoveries are not netted off recoveries shown in the quarterly and fiscal reports prepared by the audit unit.
 - It is a waste of staff resources, and demoralizing to audit staff, when substantiated recoveries are not collected, or are collected but then returned to doctors. It also undermines the audit unit's credibility. We were told that recovery reversals / returns occur when there is a lack of clarity in the *Physician's Manual*, or a difference of opinions regarding the interpretation of information in the *Physician's Manual*. When this occurs, often the Department decides not to pursue collection of recoveries.
- **2.130** We believe there should be documented procedures for authorizing, processing, recording and reviewing the reversal / repayment of recoveries. Also there should be a log of recovery reversals / returns to allow them to be easily tracked and reported.
- 2.131 We reviewed a report titled *Medicare Internal*Control Review prepared by the Office of the
 Comptroller in 2000. It contained several
 recommendations "for improving the management of
 Medicare audit recoveries". One of the
 recommendations not implemented by the Department
 was, "that Medicare formally document guidelines
 supporting staff activity to recover physician
 overpayments. Exceptions from the guidelines should

be documented in physician audit files for third party inquiries." While the Department has implemented the first part of this recommendation, the documentation of "exceptions" is still unresolved.

We identified inefficiencies in the audit unit's processes.

- **2.132** In meeting with staff of the Department and reviewing the audit unit's work, we identified the following areas where we believe improvements are needed:
 - The source of audit project ideas should be expanded to include analytical review procedures and regular review of standard exception reports, which would identify doctors or billing codes having a high risk of overpayment and / or misuse. This could lead to greater recoveries. While documentation of the audit unit states, "Audits are initiated by internal and/or external tips (i.e. practitioner/patient calls/letters; law enforcements agencies), review of profiles and exception reporting," currently the source of audit projects is mostly internal and external tips. Staff of the Department confirmed that regular analytical review of specific reports and regular review of standard exception reports is not done for audit purposes.

We believe the Department should train staff and identify / develop exception reports as needed in order to implement a risk-based audit approach.

We identified reports which we believe would be useful for this purpose and confirmed they are not regularly used by the audit unit. Many of the findings in this chapter resulted from our analysis of these reports.

Another one of the recommendations by the Office of the Comptroller in 2000 "for improving the management of Medicare audit recoveries" not implemented by the Department was, "that audit review each full-time practitioner using the 'Practitioner Profile by Individual Service Code' report over a 12 month period." We believe the recommendation is both relevant and practical. If an annual review of each doctor is not practical, the Department could select a longer period of three to five years and do all doctors on a rotational basis. Currently audit reviews the *Practitioner Profile* report for only the doctors involved in an audit.

- The unit is authorized by legislation to review doctor billings for the past seven years. Typically, the audit unit examines only a few months. The audit unit could maximize recoveries by expanding the time frame when they believe there is a high probability of identifying recoveries.
- It is time-consuming to prepare and submit the audit unit's quarterly management reports. We reviewed several years of reports and found inconsistencies and a few errors. Pertinent information was not provided. For example, recoveries are reported by fiscal year rather than by audit project, making it difficult for management to identify the work yielding the highest recoveries. Management agreed the audit unit's reporting practices should be reviewed.
- Electronic documentation prepared by the audit unit is not well organized. On several occasions staff from the Department told us they frequently cannot find information in the electronic file management system. We reviewed the audit unit's shared folder and found it contained over 200 subfolders (many of which were not clearly labeled) and most of the 200 subfolders also contained subfolders. We noticed the naming of folders and files is not standardized. We also noticed cases where the same document was stored in multiple folders.
- In addition to audits, post payment review projects and audit related work (such as: preparing cases for the Professional Review Committee, providing support on legal cases, conducting team meetings, participating in the appeal process, reporting on the unit's work, updating job steps, etc.), there were several non-audit responsibilities on the audit unit's annual work plan. Given that the priority for audit unit staff should be to identify recoveries through their audit work, spending significant time performing other administrative responsibilities does not appear to be the best use of their time. In order to maximize the time available to identify recoveries, the Department should review, and where possible reassign, the non-audit responsibilities of the auditors.
- The process for identifying recoveries related to WorkSafeNB claims is inefficient because it

includes a manual review of paper reports which are thousands of pages in length. This issue is discussed in more detail in Appendix 6.

There is limited performance reporting relating to the audit function.

- 2.133 Currently the audit unit prepares an annual audit plan with projected recoveries and reports quarterly to the Director on the actual identified recoveries. However the performance of the Medicare audit unit is not reported publicly.
- **2.134** In our opinion, the Department should publicly report the actual performance of its audit unit in comparison with targeted recoveries and provide a rationale for any variances. Such performance information should be included in the Department's annual report.

Summary

- 2.135 The recovery amounts of incorrect Medicare payments are low. Given the magnitude of the payments involved, we believe all types of Medicare payments to doctors (100%) should be included in the audit population. We believe the Department should train staff and identify / develop exception reports as needed in order to implement a risk-based audit approach. For example, doctors with high earnings should be identified, their earnings reviewed to determine reasonableness and audited if suspect.
- **2.136** Expanding the audit unit's coverage to include all Medicare payments, using a risk-based audit approach, and addressing the issues identified by our review should help the Department achieve program savings.

Appendix 6 – Detailed Findings: There are Problems with Identifying Inappropriate Doctor Billings for Workplace Injuries.

Exhibit 2.11 - Medicare Recoveries Relating to WorkSafeNB Claims over a 10-year Period

2.11 Medicare Recov	veries Relating to WorkSafe!	NB Claims over a 10-year Period
Fiscal year	Recoveries	Recoveries identified by:
2010-2011	\$ 246,918	Audit Unit
2009-2010	415,752	Audit Unit
2008-2009	503,025	Audit Unit
2007-2008	190,760	Audit Unit
2006-2007	-	-
2005-2006	400,260	Assessment Unit
2004-2005	359,727	Assessment Unit
2003-2004	-	-
2002-2003	362,267	Liaison & Assessment Unit
2001-2002	218,086	Liaison & Assessment Unit
Total recoveries	\$ 2,696,795	

Notes:

- 1. WorkSafeNB refers to the Workplace Health, Safety and Compensation Commission.
- 2. *Fiscal year* is the financial reporting period for GNB (April 1 through March 31).
- 3. *Recoveries* are payments recouped from doctors by Medicare due to 1) duplicate billing by the doctor to both Medicare and WSNB for the same service and 2) improper billing by the doctor to Medicare for a service relating to an injury under a WSNB claim.
- 4. **Recoveries identified by:** refers to the Medicare unit responsible for completing the WSNB recovery process in the specified period.

Source: Table created by the Office of the Auditor General with unaudited information provided by the Department.

Recoveries relating to WSNB claims are significant.

2.137 Medicare recoveries relating to claims paid by WorkSafeNB (WSNB) are shown in Exhibit 2.11. Exhibit 2.11 provides information for a ten-year period - fiscal years 2002 to 2011. It indicates in fiscal 2009, Medicare recoveries relating to WSNB claims were over half of a million dollars (\$503,025) and in fiscal 2006 and fiscal 2010, recoveries were over \$400,000. Medicare recoveries relating to WSNB claims are significant. (Exhibit 2.11 shows no

recoveries for fiscal years 2004 and 2007. Staff from the Department indicated recoveries were not identified during these periods due to a lack of human resources.)

Some doctors bill both Medicare and WSNB for the same service.

- **2.138** The Medicare program is a payer of last resort, meaning if the patient has other medical insurance then the insurer pays, not Medicare.
 - This is stated in the regulations. Exclusions of entitled services are listed and WSNB claims are one of the listed exclusions.
 - The Fee For Service Master Agreement in section 9 states the Medicare payment is to be the sole payment for services provided.
 - Doctors are reminded of this when they sign the Participating Practitioner's Agreement (see Exhibit 2.12) on the Medicare Practitioner Registration Form.

Exhibit 2.12 - Participating Practitioner's Agreement

2.12 | Participating Practitioner's Agreement

If you wish to become a participating practitioner under Medicare, please sign below.

I, a duly registered medical practitioner / a duly registered oral and maxillofacial surgeon, apply to practise my profession in accordance with the *Medical Services Payment Act* and the regulations under that Act. In particular, I agree to accept payment by the Medicare Branch for any entitled service provided by me for which I will submit an account to the Medicare Branch as payment in full for that service and I shall not make any further claim against any person with respect to that service.

Signature of Practitioner Date	Signature of Practitioner Date
--------------------------------	--------------------------------

Source: Medicare Practitioner Registration Form

- **2.139** Some doctors bill both Medicare and WSNB for the same service. Given the regulations, this is not permitted under the *Participating Practitioner's Agreement* and the *Fee For Service Master Agreement*. The Department should take immediate action to address such double billing.
- **2.140** When the Department identifies Medicare payments for the same services that have been paid by WSNB, they recover the payment. These are a portion of the recoveries identified in Exhibit 2.11. Staff of the Department told us there are many doctors who repeatedly appear on the recovery listing.
- **2.141** Department staff also told us there are cases where a

doctor bills Medicare, later learns the service relates to a WSNB claim and informs Medicare of the situation so their previous payment can be reversed. Given the Medicare program is based upon doctor honesty and integrity in submitting FFS claims, it is reassuring to hear of these cases.

Some salaried doctors get paid twice for WSNB related services they provide.

2.142 Salaried doctors submit shadow-claims for services provided, which allows patient records to be complete. We learned the Department sometimes identifies shadow-claims for the same services that have been paid by WSNB. This means some salaried doctors get paid by WSNB as well as Medicare for the same service; the doctor gets paid twice for the WSNB-related service. We believe doctors should be paid once, and only once for services provided.

The current process for identifying WSNB recoveries is inefficient.

- **2.143** After receiving information from WSNB regarding paid claims, Medicare produces a report which is reviewed to identify WSNB recoveries. This report is manually reviewed each quarter by the audit unit. We examined the two most recent reports and noted they contained 25,745 and 24,741 pages respectively.
- **2.144** For statistical purposes, a record of total dollar amounts reversed and the number of claims adjusted is maintained in a log. This documented evidence demonstrates, to both the staff members and the Department, that the WSNB recoveries are significant.
- **2.145** Identification of WSNB recoveries is included in the *Medicare Audit Plan 2012-2013*. The projected WSNB recoveries are \$547,291 and it is estimated to take twenty audit weeks to complete (i.e. all five auditors one week, each quarter).
- **2.146** The same general process has been used for many years. Staff have identified concerns, such as:
 - the inefficient process ("present system of identifying and adjudicating WHSCC claims relies on copious paper thereby adding to a slow and inefficient process" 18); and
 - the risk that not all recoveries are being identified

 $^{^{18}}$ Information provided by the Department – WHSCC & Medicare ... Information Sharing

due to the lack of detailed descriptions provided to Medicare by doctors and WSNB. (For example, sometimes the description of the bodily injury is ambiguous such as "multiple systems", "multiple body parts" or "lower extremities".)

- 2.147 Another one of the recommendations made by the Office of the Comptroller in 2000 "for improving the management of Medicare audit recoveries" not implemented by the Department was, "that Medicare request the WHSCC to consider providing additional information on treatment reports for audit purposes." We believe the recommendation is both relevant and practical.
- **2.148** We discussed these inefficiencies with staff of the Department and management agreed they should review the process for identifying and recovering amounts related to WSNB claims and implement changes to improve the process.

There are documented procedures for WSNB recoveries.

2.149 Documented procedures typically provide direction and guidance which promote consistency in work performed. There are documented procedures for WSNB recoveries. We reviewed the *WSNB Job Steps* and found them to be comprehensive.

The WSNB recoveries are currently the audit unit's responsibility.

- **2.150** The process for identifying Medicare payments relating to paid WSNB claims to be recovered is straight-forward. It is a simple comparison of a patient's history of paid Medicare services to the paid WSNB claims to identify Medicare services relating to the work-related injury (WSNB paid claim).
- 2.151 Currently, identifying WSNB recoveries is the audit unit's responsibility. This exercise does not need to be done by the audit unit. Exhibit 2.11 shows that within the past ten years, the work actually has been done by various Medicare units. If the responsibility for identifying WSNB recoveries was reassigned, then the audit unit would have time available to perform additional audits. This would likely increase overall recoveries of inappropriate Medicare payments.

Summary

2.152 Medicare recoveries relating to WSNB claims are significant at \$400,000 annually. Some doctors bill both Medicare and WSNB for the same service. Given the regulations, this is not permitted and we believe the Department should take immediate action to address such double billing. Some salaried doctors get paid twice for WSNB related services they provide. We

believe doctors should be paid once, and only once for services provided.

Appendix 7 – Detailed Findings: The Department's Enforcement of Doctor Compliance with Legislation and Departmental Policies Needs Strengthening.

The Department does not have an enforcement policy.

sanctions exercised to bring about compliance with the Act, regulations, policies, etc. and states the ramifications of not complying. Documented enforcement procedures usually specify the roles and responsibilities of the individuals involved, along with the timing of actions. The Department does not have an enforcement policy for Medicare. And, the Department does not have documented procedures regarding enforcement.

2.153 Typically, an enforcement policy describes the

We identified situations where the Department's enforcement of doctor compliance with legislation and Departmental policies needs strengthening.

- **2.154** We identified the following situations where the Department's enforcement action with doctors is lacking:
 - The Department does not enforce the Act with doctors who inappropriately bill the Medicare program. Earlier in this report we commented that some doctors double bill and inappropriately bill Medicare in addition to WSNB. Staff of the Department told us there are many doctors who repeatedly do so. Based on our interpretation of section 11 of the Act, we believe billing two parties for the same service is not permitted.

Aside from recovering the Medicare payments for the services that were paid by WSNB, the Department does nothing. By allowing doctors to bill Medicare in addition to WSNB, the Department is not enforcing the Act.

- The Department does not enforce their Policy that requires shadow billing. Another example of the Department's lack of enforcement involves salaried doctors and shadow billing. Although shadow billing has always been a requirement for salaried doctors, compliance was not enforced by the Department. We noted even though in 2006 the Department took action to address non-compliance, there was still 20% non-compliance as of September 2011. It appears that doctors who do not comply are not penalized; the Department is not enforcing the Policy.
- Current radiology claims do not comply with the "Physician's Manual" and regulations. We noted

the *Physician's Manual* states, "Since Spring 1992, Medicare fee-for-service claims must be submitted by electronic means." Twenty years later, most radiology claims are still being submitted manually. And, most radiology claims do not comply with the requirements stated in the regulations, which are shown in Exhibit 2.17 later in this chapter.

There are no ramifications for over-charging Medicare.

- 2.155 Currently there are no ramifications for failing to comply with Medicare legislation and policies. The Act authorizes the Department to revoke a doctor's billing privileges. However, the Department indicated they have never done this as an enforcement action. The Department also informed us they have never used penalties such as charging interest or issuing fines.
- **2.156** Department staff commented the Department needs stronger enforcement action with doctors.
 - There is no incentive for a doctor to bill appropriately. However, there is a monetary incentive to bill inappropriately.
 - Since auditing is based on sampling, an audit may or may not find inappropriate billings.
 - In the event an audit identifies inappropriate billings, the scope of the audit covers only a few months.
 Potentially recoverable amounts outside the period under audit would not be identified.
 - If an amount is required to be repaid by the doctor, there are no associated penalties such as fines, interest, or administration charges levied.

Summary

2.157 We believe the Department should enforce existing legislation that allows for a progressive range of sanctions which could deter a doctor from wrongfully billing. There should be consequences when a doctor repeatedly submits inappropriate claims.
Consequences such as fines, penalties and / or charging interest on overpayments may deter inappropriate claims. Also, staff need clearly documented procedures to allow them to perform enforcement actions confidently with no risk of interference.

Appendix 8 – Detailed Findings: The Professional Review Committee (PRC) is Active and has Opportunity to Enhance its Value.

The PRC is required by legislation and has significant authority.

2.158 The Professional Review Committee (PRC) is required by legislation and has significant authority. Upon the recommendation of the PRC, the Department can suspend a doctor from participating in the Medicare program pursuant to section 5.5(6) of the Act.

The PRC has documented "Terms of Reference".

- **2.159** Documented direction is provided to the PRC via the Act, the regulations, a documented *Terms of Reference* and an *Orientation Manual*.
- **2.160** The PRC's mandate is stated in section 5.7(2) of the Act, as follows:
 - 5.7(2) The Professional Review Committee shall (a) conduct reviews and make recommendations to the provincial authority on any matter referred to it under subsection 5.5(1),
 - (b) examine and study all matters and material forwarded by the provincial authority and make recommendations related to such matters, and (c) perform such other duties as are prescribed by
 - (c) perform such other duties as are prescribed by regulation.
- **2.161** The objectives of the PRC are stated in section 26 of the regulations, as follows:
 - To enhance the standards of medical service
 - To protect the interests of the public, government, the medical profession...
 - To provide experienced professional counsel to a medical practitioner or oral and maxillofacial surgeon whose pattern of practice under the medical services plan appears not to be in the best interest of the public, the medical profession or the oral and maxillofacial surgery profession.
- **2.162** The Act also provides members with protection against legal action taken as a result of their participation in the PRC. The regulations state the composition and appointment of the members; their term of service and remuneration; the rules and procedures for conducting its business; and the responsibilities of the Department.
- **2.163** The PRC's *Terms of Reference* are consistent with legislation. They paraphrase the committee's mandate,

- scope, authority, membership, remuneration and explain the committee's reporting requirements.
- **2.164** The *PRC Orientation Manual* is dated 2004 and needs updating. However, most of the information provided is relevant and the manual should be useful to members. We found the ten-page manual to be comprehensive. It includes topics such as: a history of the committee, a summary of the relevant legislation, the work of the audit unit, the stipend and legal protection, a glossary, and meeting preparation and procedures.

The PRC has a history of being active.

- **2.165** We saw documented evidence that the PRC has been active since 1998. However, Department staff told us the committee has been active since at least 1990, when the audit unit was created.
- **2.166** The PRC's meetings are scheduled and agendas and minutes are prepared.

The PRC does not meet regularly.

- **2.167** The PRC's *Orientation Manual* indicates the committee meets "each month, September through June" and "The schedule for the year, including storm dates, is provided to the members in early August." Given this, we expected the PRC would meet ten times each year.
- 2.168 We reviewed the committee's documentation for the calendar years 2000 to 2011, including the annual meeting schedules, minutes of meetings, meeting cancellation notifications, etc. We found the committee met between two and six times per year during the twelve-year period. The committee met five times in 2011. Exhibit 2.13 presents a summary of our review of the PRC's documentation.
- **2.169** Staff of the Department told us the PRC met when the audit unit had a case to submit to them for examination. If the audit unit did not have a case needing PRC's examination, the PRC meeting was cancelled. (Not all audit cases are submitted to the PRC for review. The audit unit decides when this professional review is needed.)

2.13 Professional Review Committee (PRC) Meetings and Annual Reports # of # of meetings meetings held per Period scheduled minutes **Annual Report (date issued)** 2011 10 No report 4 2010 10 No report 2009 10 4 No report 2008 10 5 No report 2007 3 10 No report 2006 10 5 Report dated June 8, 2006 for period of October 2003 to May 2005. 2 2005 10 2004 10 6 5 2003 10 Report (undated) for period of October 2001 to October 2003 2002 10 4 No report 9 2001 3 No report 3 reports for 2000, 1999 & 1998 2000 8 4

Exhibit 2.13 - Professional Review Committee (PRC) Meetings and Annual Reports

Notes:

- 1. **Period** refers to the calendar year in which the meetings were scheduled.
- 2. # of meetings scheduled refers to the meetings planned and scheduled at the beginning of the period.
- 3. # of meetings held per minutes is a measure of the number of meetings held during the period based on the number of approved meeting minutes identified for the period.
- 4. *Annual Report* refers to a document identified in the *PRC Orientation Manual* that requires annual submission to the Minister by the committee Chair.

Source: Table created by the Office of the Auditor General using information provided by the Department.

PRC has opportunity to expand its value.

- **2.170** The Department values the expertise of the PRC. The examination of an audit case by the PRC adds credibility to the work of the audit unit and provides assurance to both the Department and the doctor involved that the recovery claim is appropriate.
- **2.171** Reviewing audit cases is part of the PRC's mandate. Section 5.7(2) of the Act states, "the Professional Review Committee shall...examine and study all matters and material forwarded by the provincial authority and make recommendations related to such matters..." The PRC also has authority to review billing patterns and make

recommendations as stated in sections 5.5(1) and 5.7(2)(a) of the Act. Specifically, section 5.5(1) of the Act states the Department may refer to the PRC and it shall review patterns of billing for:

- (a) quality of service (below minimum standards)
- (b) level of service (in excess of requirements)
- (c) misuse of the fee schedule

Based on the results, the PRC shall make recommendations to Health. In addition to the legislation, these two functions are listed in both PRC's *Terms of Reference* and the *Orientation Manual*.

- 2.172 We believe the PRC has an opportunity to expand its value to the Department by reviewing analyses of Medicare billings and providing comments to the audit unit. As indicated by the Act, this review may identify areas where inappropriate or unneeded services have been claimed and / or misuse of the fee schedule. Both could result in recoveries, either directly or indirectly via a recommendation for an audit. Given the PRC needs only to meet approximately five times per year to review audit cases, other monthly meetings could be held to review and analyze patterns of billing.
- **2.173** We discussed this with members of the PRC who were very receptive to the opportunity to expand its value to the Department by reviewing billing patterns and making recommendations regarding possible misuse of the fee schedule.

The PRC does not report annually.

- **2.174** The PRC has not prepared an annual work plan or report to the Minister in recent years. According to the PRC's *Terms of Reference* and *Orientation Manual*, annual reporting to the Minister is required.
- 2.175 The PRC's Terms of Reference states the following in the section labeled "Reporting": "The Professional Review Committee reports to the Minister of Health or his/her designate. In collaboration with the Department of Health, the PRC shall prepare an annual work plan and report to the Minister annually on the status and outcome of work plan items."

- **2.176** The PRC's Orientation Manual states, "The Chairperson is responsible for the preparation of any correspondence necessary on behalf of the Committee, as well as, the Annual Report to the Minister..." ¹⁹
- **2.177** We reviewed the PRC's documentation for the calendar years 2000 to 2011. The PRC did not prepare an annual work plan for any of the twelve years. The PRC prepared three reports to the Minister during this twelve-year period, the last of which was dated 2006 (as was shown in Exhibit 2.13). We believe the Professional Review Committee should report to the Minister as required in their *Terms of Reference* and *Orientation Manual*.

Summary

2.178 The PRC has documented *Terms of Reference* and has a history of being active. However, the PRC does not report annually to the Minister as required according to its *Terms of Reference* and *Orientation Manual*. We believe the PRC has an opportunity to expand its value to the Department by reviewing analyses of Medicare billings. As indicated by the Act, this review may identify areas where inappropriate or unneeded services have been claimed and / or misuse of the fee schedule. Both could result in recoveries, either directly or indirectly via a recommendation for an audit.

¹⁹ The Professional Review Committee Orientation Manual, October 2004, page 10.

Appendix 9 – Detailed Findings: Fee-For-Service Payments Need More Monitoring.

Exhibit 2.14 - Medicare FFS Payments to Doctors (fiscal year 2010-11)

2.14	Medicare FFS Payments to Doctors (fiscal year 2010-11)				
FFS payment range		# of doctors	% of total # of doctors		
Greater than \$1,000,000		13	0.8%		
\$500,001 to 1,000,000		132	8.1%		
\$400,00	01 to 500,000	111	6.8%		
\$300,00	01 to 400,000	153	9.4%		
\$100,000 to 300,000		468	28.8%		
Less than \$100,000		746	46.0%		
Total #	of doctors	1,623	100.0%		

Notes:

- 1. *FFS payment range* is the range of FFS payments to doctors selected by OAG for comparison purposes.
- 2. # of doctors refers to the number of doctors that fall into each range.
- 3. *Total # of doctors* is the total of all doctors presented in the report (and excludes doctors with FFS payments of \$0).
- 4. **Less than \$100,000** which includes amongst other items doctors whose primary income is from salary or sessional arrangements with limited FFS billings as well as doctors working part-time, as locums (replacement doctors), and those working only a portion of the year due to new employment and retirements.
- 5. There is no differentiation of the data by doctor specialty. (There are 44 specialties.)

Source: Table created by the Office of the Auditor General with information provided from the Department – <u>Consolidated Practitioners Cumulative Earnings Report IR3542</u> (unaudited) for the period 2010-11 [<u>IR3542 – CER 2010-2011</u>].

FFS payments to many doctors appear high when compared to budget estimates.

2.179 Exhibit 2.14 shows FFS payments to doctors by range. It indicates the number and the percentage of doctors receiving payments within each range. (It shows only FFS payments to doctors and does not include sessional and salary payments.) According to the Department, the following figures were used while budgeting for 2011. "The estimated annual earnings of a general practitioner was \$291,418 and the average annual earnings of a specialist was \$420,977 (this specialty average is the average earnings of all specialties)." Given this, we believe

remuneration greater than these figures should be considered high.

- **2.180** Our observations from Exhibit 2.14 include the following:
 - There were 13 doctors who received FFS payments in excess of \$1 million.
 - There were 145 doctors (9%) who received FFS payments in excess of \$500,000.
 - There were 409 doctors (25%) who received FFS payments in excess of \$300,000. Note if the doctors with FFS payments less than \$100,000 (salaried, sessional and part-year doctors) were excluded, this would increase to 47%.

There is limited monitoring of FFS payments.

- **2.181** Consistent monitoring of FFS payments is crucial. There is significant risk of overpayment given the complexity of the system, the fact services are not confirmed as received by the patient and there is no penalty for overcharging.
- **2.182** There is very limited monitoring of FFS payments. Our observations include the following:
 - No one is assigned primary responsibility for monitoring FFS payments. While the *Medicare Insured Services and Physician Remuneration* unit has monitoring responsibilities, staff indicated their oversight of FFS payments is limited to monitoring the "FFS cap" for salaried doctors.
 - No analytical review procedures are done on a regular basis. For example, there is no regular review of the doctor payment register. FFS payments are made once every two weeks.
 Individual doctor totals are not reviewed to identify unusually high amounts, which then could be explored further to determine if they are reasonable.
 - No standard exception reports are generated and reviewed on a regular basis. For example, it may be worthwhile to have an exception report listing doctors with claims for more than a reasonable number of patients per day. These could be explored further to determine if the cases are realistic.
 - There are no documented monitoring procedures.
 - There are no regular monitoring practices to identify and analyze claims of high earners.
 - The automated FFS payment system has a monitoring component which has not been

developed and enabled.

2.183 We observed two specific areas where monitoring is lacking and consequently doctor overpayments may be occurring.

Monitoring of the FFS cap for salaried doctors is inadequate.

(Example 1)

- **2.184** The *New Brunswick Policy on Salaried Physicians* (Policy) and the *Medical Pay Plan* (MPP) state a salaried doctor is permitted to bill FFS in the following situations:
 - services performed outside the scope of the salaried arrangement and outside the normal hours of work, which are 37.5 hours weekly between 8:00 a.m. and 6:00 p.m. Monday to Friday. (These are billed through a doctor's account using the automated FFS payment system.)
 - mandated on-call services outside of normal working hours (These are billed through a separate "on-call group account" using the automated FFS payment system.)
- 2.185 While there is no limit to claims made to a salaried doctor's mandated "on-call group account", there is a limit to other FFS earnings for salaried doctors. The Policy and the MPP consistently state there is a "Feefor-Service income threshold". FFS billings outside the mandated on-call program are paid at 100% up to a maximum amount stated in the MPP for a fiscal year. Once the threshold is reached, subsequent claims are paid at 50% of their listed value. The threshold for 2011 was \$48,438. This threshold or FFS billing maximum for salaried doctors is commonly referred to as "the cap".
- **2.186** Responsibility is assigned to a staff member in the *Medicare Insured Services and Physician Remuneration* unit to monitor the FFS billings of salaried doctors and responsibility is assigned to a staff member in the *Financial Services* unit to reduce payment to 50% for claims submitted by salaried doctors who have been identified as having reached "the cap".
- **2.187** We reviewed the Department's process for monitoring the FFS cap for salaried doctors and found the following:
 - Monitoring of the cap was done for only the first three quarters of 2011. Therefore, doctors reaching

- the cap in the fourth quarter were not identified and the 50% payment rule was not applied. This likely resulted in the overpayment of some doctors.
- Some doctors were identified as having reached the cap but the 50% payment rule was not applied. The Department could not provide documentation to substantiate the reason for providing this exemption.
- Monitoring the cap is done in isolation, excluding any review of a doctor's "on-call group account" balance or claims. Doctors could mistakenly or intentionally submit FFS claims subject to the threshold to the "on-call group account", which is not monitored, and those claims would not be included in the doctor's total FFS payments for cap purposes. This could result in an overpayment of 50% on claims.
- **2.188** We selected a small sample of five salaried doctors with FFS payments greater than \$120,000 to determine if their payments had been capped. We found the following:
 - Two had been identified as having reached the cap and their subsequent FFS claims were adjusted as per the 50% payment rule.
 - Three had been not been identified as having reached the cap. Further review indicated the high FFS payments were because of significant billings to the doctors' "on-call group account" and billings to their FFS accounts were below the cap. Without the audit unit doing substantially more work, the Department could not indicate whether there were inappropriate billings to the "on-call group accounts." We make observations regarding the "on-call group account" for the three doctors in the next section.

There is no monitoring of the "on-call group account" for salaried doctors.

(Example 2)

2.189 A salaried doctor will have an "on-call group account" if the doctor participates in a mandated on-call program at a hospital. An "on-call stipend" is a payment made to a doctor for being available to provide patient services after-hours, on weekends and on holidays according to a schedule prepared for a hospital. Should the doctor be called into the hospital and perform urgent or emergency services, the doctor may also bill for those services. Both the stipend and the emergency services are billed through the doctor's "on-call group account" which is part of the

automated FFS payment system.

- 2.190 While there is no "cap" on claims made to a salaried doctor's mandated "on-call group account", monitoring this account is still important to ensure only eligible emergency services are billed. The Department is aware some doctors inappropriately submit claims relating to other services, which should be submitted to the doctor's FFS account that is subject to the cap.
- **2.191** The Department informed us of the following:
 - The Department has no controls to prevent the inappropriately submitted claims from being paid.
 - The only method of identifying wrongfully submitted claims is via an audit, which is a very involved and time-consuming process.

Exhibit 2.15 - Review of 3 Doctor "on-call group account" Payments and Other Remuneration (2010-11)

2.15 Review of 3 Doctor "on-call group account" Payments and Other Remuneration (2010-11)							
		Doctor A		Doctor B		Doctor C	
	#	Payment	#	Payment	#	Payment	
Services billed to the "o group account" on the d a stipend payment		\$149,887	479	\$86,922	540	\$114,802	
Services billed to "on-ca group account" on dates no stipend payment		95,762	69	16,917	93	24,068	
Total on-call services (excluding stipends)	-	\$245,649	-	\$103,839	-	\$138,870	
Stipend payments	97	13,618	112	14,767	47	6,598	
Total on-call payments	; -	\$259,267	-	\$118,606	-	\$145,468	
Other FFS	-	-	-	1,977	-	4,556	
Total FFS payments	-	\$259,267	-	\$120,583	-	\$150,024	
Salary	-	329,291	-	321,165	-	275,763	
Sessional and other	-	27,001	-	30,744	-	27,399	
Total remuneration	-	\$615,559	-	\$472,492	-	\$453,186	

Notes:

1. Under each doctor column:

- "#" refers to the number of services the doctor billed to their "on-call group account" and the number of stipend payments made to the doctor.
- "Payment" refers to the total payments made to the doctor for the services provided and for stipends.
- 2. Services billed to the "on-call group account" were separated based on whether they occurred within a 24-hour stipend period for mandatory on-call coverage or were outside of this period.
- 3. Stipend payments refer to the payments made to doctors participating in the mandated on-call / second call program for remaining "on-call" in case an approved facility (typically hospitals) requires them to provide patient services after-hours and on weekends and holidays. Stipends are only paid once in a 24-hour period.
- 4. Other FFS refers to FFS payments to the doctor for FFS billings to accounts other than the "on-call group account".
- 5. Salary refers to the total salary remuneration paid to the doctor per the Department's report.
- 6. Sessional and other refers to any sessional remuneration paid to the doctor as well as other payments such as benefits and adjustments per the Department's report.

Sources: Table created by the Office of the Auditor General with information provided from the Department - Consolidated Practitioners Cumulative Earnings Report IR3542 (unaudited) for the period 2010-11 [IR3542 - CER 2010-2011], and an associated analysis by the Department -"Monitoring and Compliance Overview of Supplied Data".

- **2.192** Exhibit 2.15 presents a review of three doctor "on-call group account" payments and other remuneration. Without the audit unit doing substantially more work, the Department could not indicate whether there may have been inappropriate billings to the "on-call group accounts".
- **2.193** Our observations from the analysis of the three

doctor's remuneration in Exhibit 2.15 include the following:

- Two doctors had limited other FFS billings. Other FFS billings were \$1,977 for doctor B and \$4,556 for doctor C. Since the other FFS payments were below the threshold of \$48,000, the cap was not applied.
- While only mandated on-call stipends and claims are acceptable in the "on-call group account", each of the accounts contained FFS billings without stipends.
 Payment of a stipend confirms the doctor was on-call that day and was permitted to bill claims through their "on-call group account". Absence of a stipend payment indicates their claims may have been inappropriate they should have been billed as regular FFS claims subject to the cap.
- Using doctor A as an example, there were 219 (32%) FFS billings without stipends that may have been inappropriately billed. The total payment for these claims was \$95,762. For doctor A, had the claims without stipends that were billed to the "on-call group account" been billed to the other FFS accounts, the billings would have been subject to the \$48,000 cap. Paying claims in excess of the cap at 50% would have resulted in FFS payments of approximately \$72,000 rather than \$95,762.

The use of a wrong account may cause overpayment.

- 2.194 All doctors registered with Medicare are provided with a service provider number and a FFS personal account. Salaried doctors are also provided with a shadow-billing account and an "on-call group account". Some doctors also have a corporate account. We were told many doctors have several accounts and we observed an example of a doctor with six accounts.
- 2.195 The use of a wrong account may cause overpayment. For example, a salaried doctor may incorrectly post their shadow billings to their FFS personal account, rather than their shadow-billing account. Claims submitted to their shadow-billing account are for Departmental tracking purposes only and are not paid. Claims submitted to their FFS personal account are paid at 100% up to approximately \$48,000 (the cap) and then at 50%. Department personnel informed us of cases where salaried doctors have been paid in error for services provided during their regular salaried hours.
- **2.196** The problems with "on-call group account" billings, as previously discussed, also provide an example of

potential overpayment through use of the wrong account.

Summary

2.197 We believe the Department should develop, document, assign and implement proper monitoring procedures for all FFS payments, including FFS payments to salaried doctors such as the cap and the "oncall group account".

Appendix 10 – Detailed Findings: Radiologist Payments Need Better Controls and Monitoring.

Exhibit 2.16 - Methods of Paying Doctors in the Medicare Program

2.16	2.16 Radiologist Remuneration by Range (fiscal year 2010-11)					
	Remuneration range	# of radiologists	% of total # of "full-time" radiologists			
Greater than \$1,000,000		5	7.35%			
\$750,000 to 1,000,000		19	27.94%			
\$500,000 to 749,999		21	30.88%			
\$250,000 to 499,999		14	20.59%			
Less than \$250,000		9	13.24%			
Tota	al # of radiologists (status codes 11, 15, 31)	68	100.00%			
# of	radiologists with all other status codes	66				
Tota	al (all radiologists)	134				

Notes:

- 1. *Radiologist* refers to a doctor practicing diagnostic radiology or nuclear medicine.
- 2. **Remuneration range** is the range of remuneration selected by the OAG for comparison purposes. **Remuneration** is the total of all payments of all types by Medicare.
- 3. # of radiologists is the total number of radiologists practicing diagnostic radiology or nuclear medicine in the specified range.
- 4. *"full-time" radiologists* refers to those with the following status ("status" of a radiologist refers to the categorization under which the radiologist is originally registered by Medicare):
 - Status 11 Full-time fee for service
 - Status 15 Full-time salaried with other remuneration
 - Status 31 Full-time salaried with no other remuneration
- 5. # of radiologists with other status codes is the number of radiologists with a status not specifically listed above. These would include short-term locums, retirees, out of province practitioners, etc.
- 6. *Total (all radiologists)* figure of 134 includes one radiologist paid salary; remaining 133 radiologists were paid FFS.
- 7. This information includes only radiologists practicing diagnostic radiology or nuclear medicine in valid zones with total payments exceeding \$0.

Source: Table created by the Office of the Auditor General with information provided by the Department – <u>Radiology - Comparative Practitioners Cumulative Earnings Report IR3567</u> for the period April 2010 to March 2011 (unaudited).

Total payments to some radiologists appear high when compared to other specialties.

- 2.198 The number of radiologists within a specified payment range is shown in Exhibit 2.16. The chart indicates there were 68 regularly paid radiologists during 2011. Of these, 45 radiologists (66%) were each paid more than half of a million dollars, which includes five radiologists who were each paid more than a million dollars. Department staff agreed that payments to radiologists appear high when compared to other specialties.
- **2.199** Other observations regarding payments to radiologists include the following:
 - Status 13 is used for "short-term fee for service locums". (A locum is a replacement doctor.) We included status 13 in Exhibit 2.16 in the "# of radiologists with all other status codes" figure. There were 17 radiologists with status 13. Most of these radiologists (16) had total payments of \$72,474 or less, which seems reasonable given locums do part-time / replacement work. However, one status 13 radiologist was paid \$651,406 which appeared high and unusual.
 - There were only five other radiologists with payments over \$100,000 in the "# of radiologists with all other status codes" group. Three had payments between \$100,000 and \$199,999; the fourth radiologist was paid \$213,730 and the fifth radiologist was paid \$851,955 and had a status "not in active practice NB". Given the amounts paid to most "radiologists with all other status codes", the payment of \$851,955 to one radiologist appeared high and unusual.
 - The radiologist with the highest remuneration was paid \$1,430,121. We also noted over the five-year period 2006-07 to 2010-11, \$6.3 million was paid to this one radiologist. A Department staff member agreed that the payments to this radiologist appear high. The staff member explained some radiologists are "certified" and are paid a higher rate; however, it was confirmed this was not the case for this specific radiologist.

- **2.200** We did an analysis of radiologist remuneration by zone for 2011 and found the following:
 - For seven of the eight zones, the zone average was more than half of a million dollars.
 - The median for one zone was \$821,863, which means four of the nine radiologists in the zone received payments in excess of \$821,863 and four of the nine radiologists in the zone received payments less than \$821,863.

These figures appear high when compared to other specialties.

Claims submitted for radiologists are not subject to regular payment controls.

- **2.201** While radiologists are part of the FFS group of doctors paid under the FFS agreement, claims submitted for radiologists are not subject to regular payment controls. The payment process for radiologists is distinct from other FFS doctors in the following ways:
 - An indirect manual payment process is used.
 Radiologists are paid by the RHA, which in turn is repaid by Medicare through a manual payment process. Typically, FFS doctors are paid using the automated FFS payment system; the doctor submits claims electronically and is paid directly by Medicare via direct deposit to their bank. The indirect manual process for radiologists may be more costly, given the amount of staff time involved, than the direct automated process for typical FFS doctors.
 - Important claim information is not provided, which results in fewer payment controls and no recoveries. Radiologists are the only FFS doctors that do not submit claims using the automated FFS payment system, which has several built-in edits, validation checks and payment controls. With the exception of two zones, radiologists are paid without submitting patient information which is required for every claim paid under the FFS agreement. Without adequate claim information, Medicare is unable to validate the charge prior to payment or audit the payment afterwards.
 - Very limited adjudication rules for electronic radiology claims means fewer controls. Department staff indicated there are two zones which do submit electronic claims for radiologists via the FFS automated payment system. Although this is better

than the manual payment system, it is still not as controlled as other FFS payments because there are fewer adjudication rules applied to radiology claims than those applied to other FFS claims. (Adjudication rules are conditions that must be met in order for the claim to be paid. For example, a claim for examining an X-ray of a uterus must be made with a Medicare number for a female.)

The Department does not recover Medicare costs relating to radiology as important claim information is not available in the Department.

- **2.202** Because radiologists are not using the automated FFS payment system, important claim information is not provided and the Department does not recover Medicare costs relating to radiology.
- 2.203 Typical FFS payments with claim information allow the Department to recover payments relating to out-of-province patients and third-party billings such as WSNB. Typical FFS payments with claim information are also subject to audit, which often results in recoveries. Since radiologists are paid without providing important claim information, none of these typical recoveries are possible.

There is no monitoring of radiologist remuneration by the Department.

- **2.204** None of three units within the Department that are involved with radiologists monitor their remuneration.
- **2.205** Also, given payments to radiologists are a flow-through cost to the RHAs, there is no incentive for the RHAs to monitor payments or control costs.

Current radiology claims do not comply with the Physician's Manual and regulations.

- **2.206** The *Physician's Manual* states, "Since Spring 1992, Medicare fee-for-service claims must be submitted by electronic means." It is now twenty years later, and radiology claims are still being submitted manually by most zones.
- **2.207** The regulations under the *Medical Services*Payment Act state the requirements for all claims. See Exhibit 2.17. Current radiology claims do not comply with the stated requirements because information on the patient, diagnosis and treatment are not submitted.

Exhibit 2.17 - Medicare Claim Requirements per Regulations under the Medical Services Payment Act

2.17 Medicare Claim Requirements per Regulations under the Medical Services Payment Act

The regulations under the *Medical Services Payment Act* require that all claims must be submitted with the following information:

- whether the practitioner or beneficiary is to be paid;
- patient's name;
- patient's Medicare number;
- · patient's date of birth;
- patient's sex;
- practitioner's name and practitioner number;
- practitioner's role i.e.: the surgeon, assistant, collaborating surgeon or anaesthetist;
- time spent by practitioner on service(s) if required to determine amount of payment;
- transferring or referring practitioner's name and practitioner number;
- diagnosis;
- date(s) of services charged;
- · number of services charged or hospital days;
- date of admission to and date of discharge from hospital if in-patient care is involved;
- whether services are provided at practitioner's office, patient's home, hospital (inpatient), hospital out-patient or emergency department, nursing home, or elsewhere;
- site code must be provided for services rendered in location 3, 5, 6 and telemedicine services and walk-in clinic services;
- service code(s) and fee charges;
- · total line count;
- treatment information or remarks;
- · date of completion of form;
- signature of the patient in the case of services for which the practitioner is opted-out.

Source: Excerpt from the *Physician's Manual* 27/03/08 available on Department's website.

The Department's radiology project to automate billings is slow moving.

2.208 The Department started a project to automate radiology billings in 1998. We reviewed a project proposal for standardized automated radiology billing dated February 4, 2011 which stated the following:

In the fall of 1998, the Department of Health and Wellness initiated a project to bring the radiology billings into the computerized FFS payment system. Medicare had promised each region a maximum amount of \$25,000 to enhance their system to accommodate this change. It was expected this amount could be recovered in the first year as Medicare will no longer be

responsible for services billed to them erroneously nor those of third party (RCMP, DND, etc...). Medicare will also be able to recover the cost from other provinces for radiology services rendered to their residents while in New Brunswick. To date only two Zones (...) have made changes to allow the radiologists billings to come in as automated FFS billings with individual services and patients reported. Information is captured but no formal adjudication (assessment rules) are in place - Rules will be introduced during FFS distribution discussions this year – a working group will need to be formed with NBMS/Medicare Experts.

- **2.209** All staff with whom we spoke regarding radiology agreed with the need for "something" to be done. Many believe the recent Department interest in automating radiology billing will result in success. However, as of May 2012, fifteen months following the proposal, only the two original zones were using automated billing for radiology services.
- 2.210 Current radiologist billing practices have significant risks and may lead to the loss of considerable recoveries of incorrect payments. We believe radiologists should be required to bill through the automated Medicare system like all other FFS doctors. The lack of information, controls, monitoring and auditing regarding radiologist payments requires immediate action.

Summary

Appendix 11 – Detailed Findings: Salary Payments to Some Doctors Appear High when Compared to the Salary Scale.

Exhibit 2.18 - Methods of Paying Doctors in the Medicare Program

2.18	2.18 Medicare Salary Payments to Doctors (fiscal year 2010-11)				
	Salary payment range # of doctors				
	Greater than \$1,000,000	1			
\$500,001 to 1,000,000		10			
	\$400,001 to 500,000	17			
	\$300,001 to 400,000	108			
	\$200,001 to 300,000	187			
	\$100,000 to 200,000	104			

Notes:

- 1. Salary payments refer to salary related payments including benefits.
- 2. *Salary payment range* is the range of salary payments to doctors selected by OAG for comparison purposes.
- 3. # of doctors refers to the number of doctors that fall into each range.
- 4. There is no differentiation of the data by doctor specialty.

Source: Table created by the Office of the Auditor General with information provided from the Department – <u>Consolidated Practitioners Cumulative Earnings Report IR3542</u> (unaudited) for the period 2010-11 [IR3542 – CER 2010-2011].

Salary payments to some doctors appear high when compared to the salary scale.

- **2.211** Exhibit 2.18 shows salary payments to doctors by range for 2011. (It shows only salary payments to doctors and does not include FFS or sessional payments.) Salary payments are shown in ranges, indicating the number of doctors receiving payments within each range.
- **2.212** According to the *Medical Pay Plan* (MPP) agreement for salaried doctors, the base salaries for 2011 ranged from \$151,658 to \$266,292 ²⁰ (salary scale). Salaried doctors get benefits in addition to their base salary, and for some doctors, market

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²⁰ Medical Pay Plan – April 1, 2010. Note: there was a market adjustment for oncologists and pathologists which increased their salary. There were approximately 75 oncologists and pathologists in fiscal 2011.

adjustments for specific specialties need to be added to the base salary figure in order to determine the total contract maximum figure.

- **2.213** Salary payments to some doctors appear high when compared to the salary scale; our observations from Exhibit 2.18 include the following:
 - One doctor received salary payments in excess of \$1 million.
 - There were 11 doctors who each received salary payments in excess of \$500,000.
 - There were 136 doctors who each received salary payments in excess of \$300,000.
- 2.214 We did an analysis and observed some salaried doctors appeared to be paid more than the salary scale. We provided the Department with a sample of these doctors. The Department provided supporting documentation showing payments to the identified doctors were reasonable. Reasons for the higher amounts included: market adjustments for some specialties, supervising pay, contracts for special qualifications and retroactive pay.

Contracts are not filed in the Department for all salaried doctors.

- **2.215** Although salaried doctors are paid under the MPP agreement, typically salaried doctors have a contract with the RHA. Contracts are kept at the RHA, which provides information to the Department.
- 2.216 The Department cannot fully audit payments to a salaried doctor unless they have a copy of their contract. At the time of our review, the Department was in the process of obtaining copies of all salary contracts. A memo was issued to the RHAs dated January 2012 requesting copies of all doctors' contracts by the end of February. As of June 2012, six months later, the Department had received approximately 84% of the salaried doctor contracts and was still in the process of obtaining others.

The shadow-billing requirement is not met by all salaried doctors.

2.217 The New Brunswick Policy on Salaried Physicians states, "Salaried physicians must provide shadow billing or history only billing as required by the department." Shadow billing (also commonly called "history-only billing") is the process used by salaried doctors to submit information on services provided during their salaried hours of work. Shadow claims are similar to FFS claims except shadow claims do not get paid.

- **2.218** Shadow billing is important to the Medicare program because it provides information used for many purposes including the following:
 - maintaining historical measures of service provision and tracking numbers and demographics of patients and types of services rendered;
 - maintaining complete and accurate patient histories;
 - epidemiology studies such as diabetes, mumps, cancer;
 - public health initiatives such as immunizations;
 - resource planning, performance measurement and accountability; and
 - monitoring and audit.
- 2.219 Shadow-billing information is needed in order to properly monitor salaried doctors and audit payments to them. For example, information regarding the services provided during the salaried hours of a doctor allows the Department to monitor compliance with their contract. Shadow-billing information is also needed to audit FFS claims submitted by salaried doctors to ensure the doctor is not FFS billing for services provided during their salaried hours.
- **2.220** While "shadow billing has always been a requirement of salaried physician employment," compliance has not been enforced by the Department. Our observations include the following:
 - In October 2006, the Department created a working group with the Medical Society to address doctors' resistance to shadow billing and facilitate compliance with the requirement. It was identified that many doctors did not have the time or support to shadow bill, so the Department transferred funding to the RHAs for administrative resources dedicated to shadow billing for doctors. Also a staff member of the Department visited all doctors' offices to train the staff and identify and track those complying.

²¹ Information provided by the Department – Memo to salaried physicians October 8, 2008.

- In 2008 the Department issued a memo to salaried doctors reminding them of the shadow-billing requirement; stating while many salaried doctors were shadow billing, the majority were not; and requesting they begin by March 2009.
- In May 2011, the Department issued a memo to all salaried doctors as a directive to shadow bill by August 19, 2011 or the Department would "initiate steps to ensure compliance." And in October 2011, the Department sent shadow-billing profile reports to the doctors that had complied. Non-compliant doctors received a letter of non-compliance.
- The Department is now tracking compliance. In January 2012, the Department did an analysis and determined 80% of salaried doctors were shadow billing. (The Department indicated some doctors do not shadow bill because there are no fee codes for their specialty work. These doctors were not included in the analysis.)

Monitoring of payments to salaried doctors is lacking.

- **2.221** While there are payment controls for salary, sessional and FFS payments to most doctors, there is no monitoring of total remuneration to salaried doctors. While the total payments for each type of remuneration may appear reasonable when examined individually, it is important to examine total remuneration in order to identify risk of overpayment to a doctor.
- 2.222 We reviewed the doctor cumulative earnings report for 2011 and observed there were several salaried doctors with high other remuneration payments (FFS and / or sessional). For example, one doctor had salary payments of \$218,437, sessional payments of \$216,799 and FFS payments of \$9,654. Another doctor had salary payments of \$305,198, FFS payments of \$150,839 and sessional payments of \$80,603. A third example had salary payments of \$287,056, sessional payments of \$113,061 and FFS payments of \$58,071. This is allowed per Medicare policies; however, the total payments should be monitored.

Summary

2.223 We believe the Department should develop, document, assign and implement proper monitoring procedures for salaried doctors. Monitoring procedures should include reviewing contracts between the RHAs and the doctor to ensure compliance with the MPP. In addition, we believe the Department should continue its efforts to monitor compliance with the shadow-billing requirement and take action with those doctors who do not comply.

Appendix 12 – Detailed Findings: Sessional Amounts Paid to Some Doctors Appear High when Compared to the Policy.

Sessional amounts paid to some doctors appear high when compared to the policy.

- 2.224 We reviewed the doctor cumulative earnings report for 2011 and observed there were several doctors with high sessional payments when compared to the policy. We also noted that many doctors also received FFS and / or salary payments. For example:
 - One doctor had sessional payments of \$475,703 and FFS payments of \$825,253. We questioned the Department about this general practitioner who had received payments of over \$1.3 million. The Department indicated this doctor had a special arrangement with the RHA. We examined a copy of the agreement between the RHA and the doctor. The agreement is dated May 2007, supports the sessional payments to the doctor, and provides for termination by either party with six months written notice. Based on discussions with Department staff, we believe the agreement may not be in the best financial interest of the Province.
 - Another doctor had sessional payments of \$342,198 and FFS payments of \$461,913. The Department informed us the sessional payments related to the emergency department in a hospital and were reasonable. In order to determine the appropriateness of the FFS payments the audit unit would need to do more work.
- **2.225** We provided a list of doctors with high sessional earnings to the Department and asked for an explanation. The Department provided us with the following information:
 - Several of the doctors who received high sessional payments worked in emergency. The Department's *Policy on Sessional Arrangements* states exclusions to the policy; emergency and intensive care departments are two examples. Doctors working sessional in emergency are paid a higher hourly rate.
 - Nine of 16 doctors who received sessional payments exceeding \$400,000 were coded as sessional for record-keeping purposes. However, these doctors had *Alternate Payment Plan* arrangements with the Department. We did not do further work relating to these doctors.

There is noncompliance with the Policy on Sessional Arrangements. Three doctors had special arrangements, which are discussed next.

- 2.226 The Department's Policy on Sessional Arrangements states, "Sessional payment arrangements are intended for physicians who are retained on a part-time basis and for services which do not lend themselves to the fee for service remuneration. ... Sessional arrangements are paid for clinical care up to the maximum salary of the applicable classification."
- 2.227 Our understanding is the policy is intended to allow compensation to a doctor to be made in the most economic manner. In facilities such as nursing homes and jails, a full-time doctor is not required. Hence, paying the doctor an hourly rate (sessional) makes economic sense. The clause "up to the maximum salary of the applicable classification," means that paying the doctor with an hourly rate should not exceed the amount the doctor would be paid under a salary agreement (MPP).
- **2.228** We identified three doctors who had been paid more than they would have been paid under the contracted salary for their classification. The Department provided us with the following explanations:
 - One doctor "has an approved arrangement with the RHA dating back to 2002. This was approved by the Department...."
 - One doctor "had a sessional arrangement since April 2003 for up to 45 hours a week, which is beyond the policy. The physician retired in [fiscal] 2012."
 - One doctor had three sessional arrangements. The Department said their interpretation of the *Policy on* Sessional Arrangements was that the maximum salary clause was per sessional arrangement. Since none of the three individual arrangements exceeded the salary maximum, they felt this doctor was in compliance with the policy. However, we believe this is non-compliance since the total of the doctor's sessional payments exceeds the amount the Department would pay under a salary arrangement.

Summary

2.229 Medicare sessional payments to doctors relate to designated services paid for on an hourly basis, such as doctors working in emergency rooms and those working part-time in a nursing home or a jail. Sessional-type payments to doctors were approximately \$60 million in

2011, which represented 11% of total Medicare expenditures. Approximately 250 doctors received sessional payments in 2011. We found cases of noncompliance with the *Policy on Sessional Arrangements* and believe the Department should review and monitor the sessional arrangements with doctors to ensure compliance with the policy.

Appendix 13 – Detailed Findings: Public Reporting of Doctor Remuneration is Incomplete and Misleading.

There is no public reporting of FFS payments to individual doctors.

2.230 There is no public reporting of FFS payments to individual doctors. FFS doctors and their remuneration is not reported in *Public Accounts – Supplementary Information*.

Exhibit 2.19 - Medicare Fee for Service [FFS] Expenditures for 3 Fiscal Years

2.19	Medicare Fee for Service [FFS] Expenditures for 3 Fiscal Years				
FFS pay	ment distribution	# of doctors (2010-11)	2010-11	2009-10	2008-09
Doctors	(note 3)	1,490	\$ 291,725,033	\$ 284,571,876	\$ 271,812,348
Radiologists (note 4)		133	42,357,617	43,003,792	42,513,682
Other			17,426,061	19,480,185	19,403,350
Total FFS payments			\$ 351,508,711	\$ 347,055,853	\$ 333,729,380

Notes:

- 1. *FFS payment distribution* identifies the dispersion of Medicare payments between radiologists and all other doctors.
- 2. # of doctors (2010-11) includes any doctor that received a FFS payment during the period regardless of amount, other forms of payment received, or specialty. Source: Fiscal 2011 Consolidated Practitioners Cumulative Earnings Report IR3542 (unaudited).
- 3. *Doctors* include all specialties with the exception of diagnostic radiology and nuclear medicine.
- 4. *Radiologists* include all doctors practicing in diagnostic radiology or nuclear medicine during fiscal 2011. In addition to full time radiologists, this figure would include short-term locums, retirees, out of province practitioners, etc. Exhibit 2.16 provides additional information regarding radiologists.
- 5. *Other* refers to payments to dentists, CMPA, etc. that are not specifically linked to doctors and radiologists in the data reviewed.

Source: Table created by the Office of the Auditor General with information provided by the Department and <u>Province of New Brunswick Oracle Financial Information System Account Analysis Report</u> – Fiscal 2009, Fiscal 2010, Fiscal 2011

- **2.231** Exhibit 2.19 shows FFS expenditures for three fiscal years: 2009, 2010 and 2011. It also shows the number of doctors who received payments in 2011. There are many salaried doctors included in this figure because they do on-call work, which is paid as FFS.
- **2.232** Total FFS payments in 2011 were over \$351 million, a significant amount. In order for the

Department to demonstrate proper accountability, we believe the distribution of these millions of dollars should be publicly reported and subject to public scrutiny.

- 2.233 We discussed public reporting of FFS doctor remuneration with Department staff. We were told under the *Medical Services Payment Act* (Subsection 8.1), the Department cannot legally publish fee-for-service doctor remuneration. The Department informed us they have a legal opinion as substantiation. We requested the legal opinion and the Department indicated they could not share it with us.
- **2.234** The Department did not disagree with our suggestion that to demonstrate proper accountability FFS doctor remuneration should be publicly reported. They simply informed us it is non-compliance with legislation to publicly report FFS remuneration and section 8.1 of the Act would have to be amended to allow for the publication of doctor billings.

Public reporting for salaried doctors is incomplete and misleading.

- 2.235 Total salary payments to doctors in 2011 were approximately \$110 million. We reviewed the Employee and Supplier Lists for 2011 and found only some doctors were reported. For many of those listed, only a portion of their remuneration was shown. The Department indicated only some salaried doctors were publicly reported and no FFS payments were included in amounts shown.
- 2.236 Publicly reporting incomplete, inaccurate information on doctors' remuneration is misleading. As with FFS payments, we believe the distribution of salary payments to doctors should be publicly reported.

There is no public reporting of sessional payments to individual doctors.

2.237 Total sessional-type payments to doctors in 2011 were approximately \$60 million. There is no public reporting of the distribution of these payments. Again, in order for the Department to demonstrate proper accountability, we believe the distribution of these millions of dollars should be publicly reported.

Summary

2.238 In order for the Department to demonstrate proper accountability for over half of a billion dollars in annual spending, we believe the distribution of this spending should be publicly reported and subject to public scrutiny. Even if change to legislation is required, the Department should publicly report total

remuneration for each doctor, regardless of whether the doctor is paid via FFS, salary, sessional or alternative payment arrangements. (This would be similar to other government reporting of employee compensation and vendor payments.) In addition, to provide better accountability, the Department should publicly report annually summary-level information on doctor remuneration, such as: total payments for each remuneration method (FFS, salary, sessional, other), doctor remuneration by dollar range, doctor remuneration by specialty, etc.

Chapter 3 Department of Health EHealth – Procurement and Conflict of Interest

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Department of Health EHealth - Procurement and Conflict of Interest

Introduction

- 3.1 Since 2005, the Department of Health (the Department) has undertaken significant work to advance the Electronic Health (EHealth) initiative and a One Patient One Record vision. Key components in that vision include: Electronic Health Records (EHR), a Client Registry, a Provider Registry, a Diagnostic Imaging Repository, and a Drug Information System.
- 3.2 EHealth is an integrated set of information and communication technologies, together with related health delivery process enhancements, intended to enable the efficient and sustainable delivery of healthcare services over the full continuum of care, through the provision of integrated health information systems, tools and processes.
- 3.3 A key partner is Canada Health Infoway (Infoway) which provides funding for various EHealth projects. Infoway is an independent not-for-profit corporation created by Canada's First Ministers in 2001 to foster and accelerate the development and adoption of Electronic Health Record systems with compatible standards and communications technologies.
- 3.4 Prior to December 2011, EHealth projects were directly administered by the Innovation, E-Health and Office of Sustainability branch of the Department of Health. Operational and maintenance/support activities relating to all health technology systems were administered by the Information Technology Services branch. The Department merged these two branches into a new branch called Health Business and Technology Solutions in December 2011. The Branch was created to facilitate the design, implementation

- and operations of technology initiatives within the New Brunswick healthcare system.
- **3.5** EHealth in New Brunswick is delivered collaboratively by the Department of Health, Facilicorp NB, and the Regional Healthcare Authorities (RHAs).

Why we audited the EHealth initiative

- 3.6 During 2009, concerns were brought to the attention of the Office of the Comptroller (OoC) relating to the EHealth development projects and operational activities administered by the Innovation, EHealth and the Office of Sustainability branch. Specifically noted were potential conflicts of interest, concerns around the procurement process for professional services and possible deficiencies in contract management practices. OoC reviewed 15 of the 40 IT professional services contracts that had been signed as of April 2009. Based on its review, OoC concluded the concerns brought forward were valid and made 10 recommendations to the Department.
- 3.7 In May 2011, the Department released, through a Right to Information request, a redacted version of the OoC internal audit report. The report focused on the contract procurement process for a sample of EHealth related contracts and found a series of problems regarding how contracts were awarded and managed within the Department. The Minister of Health subsequently announced that the Department would have a review conducted of all EHealth related development and operational contracts from 2005 forward.
- 3.8 In August 2011, our Office was approached by the Department of Health regarding an audit of the EHealth projects and operational activities. We considered two primary factors when deciding to take on this engagement. First, the impact of the EHealth program on New Brunswickers is significant. The implementation EHealth systems will fundamentally affect how health care transactions are recorded, collected, stored, and accessed. It, in turn, will significantly impact the quality of the whole health care system. Secondly, the Auditor General of Canada and the auditors general of six provinces (Alberta, British Columbia, Nova Scotia, Ontario, Prince Edward Island, and Saskatchewan) conducted

concurrent performance audits of the development and implementation of Electronic Health Records (EHRs)in their respective jurisdictions during 2009 and 2010. Significant findings were reported. It was agreed with the Department that our office would test 100% of the EHealth development project and operational support contracts.

Audit Objectives and Scope

- **3.9** The objectives of our audit were:
 - to determine if the Department of Health complied with the Government procurement policy for purchases of services related to the E-Health initiative
 - to determine if conflict of interest exists in the use of consultants/contractors.
- 3.10 Our audit was performed in accordance with standards for assurance engagements, encompassing value for money and compliance, established by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.
- **3.11** Our audit work included but was not limited to the following:
 - interviews with staff of Department of Health and Department of Supply and Services;
 - interviews with staff of the internal audit team of OoC:
 - interview with the Chief Information Officer of Management Board;
 - review of the Province's guidelines and legislation with respect to purchase of services and conflict of interest;
 - review of related internal policies and procedures of the Department; and
 - examination and testing of contract related documents held by the Department of Health and the Department of Supply and Services.
- 3.12 We examined all 289 EHealth development project and operational support contracts (valued at \$108.5 million) signed from 2005 to 2011. During our testing, we found 57 instances of noncompliance in the procurement of IT services, particularly:
 - requirements for exemption from the competitive

Results in Brief Compliance with government procurement policy

- bidding process not met;
- proper contract approval process not followed; and
- proper contract amendment process not followed.
- 3.13 We also noted that the Department made frequent amendments to original contracts. In fact, 59% (67 of 114) of the originally signed contracts were amended on average 2.6 times.
- 3.14 We realize that it was the Department's normal practice to divide complex or large IT development projects into several phases and the next phase was always treated as an amendment to the previous one. We also understand amendments were not totally avoidable, given the magnitude and complexity of some projects. However, during our testing we found 24 amendments valued at \$7.6 million for system maintenance and operation contracts. We believe for regular system maintenance and operation, as well as routine IT development projects, the Department should have been able to define the scope, deliverables, timelines and the costs to complete the work before entering into contracts. Changes to original contracts creates a risk of project delays and cost overruns, and should be avoided wherever possible.
- **3.15** It should be noted the Department had put procedures in place to address the OoC recommendations by the time of our audit.

Conflict of interest

- **3.16** During the period under audit with respect to conflict of interest we found the Department relied on consultants extensively for the EHealth initiative. The following three situations appear to have placed external service providers in a conflict of interest position:
 - The Department contracted consultants as project managers who managed their own firms contracts and/or could access competitor information.
 - Consultants were part of project evaluation committees tasked with recommending which consultants should be engaged for individual projects.
 - A consultant was a key member of the EHealth Steering Committee, a position of influence over governance and oversight of EHealth projects and operations.

- **3.17** Our findings were consistent with those of the OoC. The OoC report included recommendations to address all of these concerns.
- **3.18** We further noted the Department has put procedures in place to address the OoC recommendations:
 - The Department is still relying on external resources in some cases to staff project manager positions, but with additional restrictions. For example, external project managers cannot see other firms' rates when they approve the timesheets for other firms' personnel and project spending.
 - A contractor's firm is not allowed to respond to a Request for Proposal if a member of their staff is part of the project evaluation committee or acting as a project manager for the project.
 - The external consultant who was a key member of the EHealth Steering Committee is no longer with the Department due to contract expiry. Currently all members of the steering committee are internal permanent employees of the Department of Health.

Compensation of Consultants

- 3.19 Project managers of the two largest multi-year projects under the EHealth initiative are consultants. The Department paid almost \$1.5 million to an IT firm for one project manager from 2005 to 2011. It paid another IT firm more than \$700,000 for a three year period from 2009 to 2012 for the other project manager. It also contracted a third consultant for ongoing system operation and maintenance support from 2006 to 2011 and paid more than \$1.2 million.
- **3.20** In total, this is over \$3.4 million paid to three consultants over six years, averaging more than \$200,000 per individual per year. In addition, to the \$3.4 million the Department provided office space and equipment to contracted consultants.
- **3.21** In these three cases, we believe the use of consultants was significantly more costly to the Province than had this work been completed by departmental staff. (i.e. in-sourced)
- **3.22** In our opinion there are savings that could be realized by in-sourcing the performance of ongoing IT

systems operation and maintenance work. Where the expertise to handle this work does not currently exist internally, the Department could contract consultants in the shorter term. Such contracts could provide both for the completion of necessary operation and maintenance work, and the transfer of knowledge to Departmental staff. This would allow responsibility for completion of this work to be transferred to less costly internal resources in the longer term.

Implications for the rest of government

- 3.23 We were informed numerous times during our work that practices with respect to the use of IT consultants are similar elsewhere in government to what we observed at the Department of Health. This would imply many of the procurement and conflict of interest issues our Office, and the OoC, identified in connection with the EHealth initiative may exist in other departments and Crown agencies.
- 3.24 We believe this is an area that should be addressed by government. From discussions with the recently appointed Chief Information Officer (CIO) of Management Board, we understand that the role of his office will include setting government-wide policies for the procurement of IT resources. It will also include monitoring departmental activity to ensure that CIO policies are being complied with.

Recommendations

3.25 Recommendations from our findings and the OoC report are found in Exhibit 3.1.

Exhibit 3.1 – Summary of Recommendations

Source	Recommendations	Department's Response	Target Date for Implementation
	Objective One: Compliance with government procurement policy		
Office of the Comptroller	 3.50 The findings in the OoC's report are consistent with ours. Recommendations regarding the procurement process from the OoC's report are applicable to our findings as well. The OoC's recommendations included: Contract managers should ensure that the requirements of the <i>Public Purchasing Act</i> are followed. Documentation should be maintained supporting Minister's exemptions particularly when the exemption for Specific Skills or Sole Source of supply is used. A purchase order should be obtained prior to the payment of any amounts and the value of the purchase order should not be exceeded. A signed statement of work should always be obtained prior to the commencement of the project. When contracts are negotiated and signed with vendors, only contracts drafted by PNB should be utilized. Vendor contracts should not be used. 	Health is preparing a refresher communication for managers with respect to the requirements of the <i>Public Purchasing Act</i> . Documentation related to any exemption request will be maintained by the Corporate Support Services Branch. The Department of Health currently establishes commitment amounts upon receipt of a purchase order and tracks payments against the commitment. The Financial Services Branch along with the Corporate Services Branch of the Department of Health will review this process to ensure purchase orders cannot be exceeded. The Department of Health will amend its current contract management process to include the statement of work documentation with the contract's signing documentation. This documentation will be signed prior to commencement of the work. The Department of Health implemented a detailed contract management process in 2007. This process continues to be updated and now includes a series of contract templates to ensure the Department's best interests are protected. The Department's templates are now used with few exceptions (exceptions would only include examples such as Microsoft software licensing agreements).	

Exhibit 3.1 – Summary of Recommendations (continued)

Source	Recommendations	Department's Response	Target Date for Implementation
	Objective One: Compliance with government procurement policy		
Office of the Auditor General	 In addition to the recommendations made by the OoC, we recommend: To avoid frequent contract amendments, the Department of Health adequately plan and define the scope, deliverables, timelines and costs for each IT contract and complete all required documentation before signing contracts or allowing work to commence; and 	DOH [Department of Health] has a formal Project Management Framework in place that specifies all required steps in the planning and implementation of a project. This includes a formal process for procurement and contracting of external resources when required. Statements of Work (SOW) are developed for all projects. The Contract Officer reviews all IT SOWs with the Director of Development and Delivery to ensure they are as detailed and complete as possible before issue of any SOW or RFP[Request for Proposal], and again prior to the completion of a contract.	Implemented
Office of the Au	In the event contract amendments are required, the Department of Health properly prepare and approve change requests and amendments to original contract agreements.	Since the amalgamation of the E-health and ITS [Information Technology Services] branches to form HBTS [Health Business and Technology Solutions], Change Request policies, procedures and forms have been standardized to eliminate any problems with the approval of Change Requests and the amendment of contracts. This includes the review of all change requests by a committee to ensure due diligence is followed and to recommend an appropriate course of action.	Implemented.

Exhibit 3.1 – Summary of Recommendations (continued)

Source	Recommendations	Department's Response	Target Date for Implementation
	Objective Two: Conflict of Interest		
	 3.69 In general, the findings in the OoC's report were consistent with ours. The OoC's recommendations related to conflict of interest are applicable to our findings in this area as well. The OoC's recommendations included: Employees and contractors should sign off as having read and understood AD-2915 (Conflict of Interest) on an annual basis. For employees, this could be incorporated as part of their annual performance review. As stated in AD-2915 employees must advise the Senior Executive Officer 	All staff and contractors of Information Systems have read AD-2915. There have not been any conflicts of interest declared. This will be an annual process. The Executive Management Committee of Health will incorporate this practice into the annual performance appraisal process for the Department.	
e Comptroller	 of any conflict of interest situation in which they find themselves. Documentation should be maintained. • Managers and directors should familiarize themselves with the meaning and definition of an "apparent conflict of interest ". A suggested reading could be the document on this topic published by the Treasury Board of Canada Secretariat. 	This has been completed within Information Systems. It has generated considerable awareness and discussion amongst and has increased awareness of the issue.	
Office of the	 Contractors should not occupy management positions within the department. Where the situation is unavoidable, the contractor should be strictly limited to the financial information which they can access particularly with respect to competitor's information. 	The two contracts where this applies expire before the summer of 2011. Both of these positions have been identified for transition to Health employees.	
		In the event that the recruitment process does not identify a candidate for full-time employment then Health will consider its options. In the event that	
		either of these positions, or any other management position, becomes occupied by a contractor, then all	
		of the actions recommended in this report will be implemented. Any other actions relevant to the specifics of the situation will also be implemented.	

Exhibit 3.1 – Summary of Recommendations (continued)

Source	Recommendations	Department's Response	Target Date for Implementation
	Objective Two: Conflict of Interest (continued)		
oller	Where contractors are members of project steering committees, they should not take part in any discussions surrounding the contracting/outsourcing of any work for the project.	This has been implemented. Contractors will be asked to leave the meeting and the minutes of the meeting will reflect that.	
the Comptroller	 Contractors should be required to disclose business relationships with other contractors working in the department when a partnership or joint venture type relationship exists. 	This will become a standard requirement in all contracts within the Department of Health. The requirement will not be restricted to information services.	
Office of the	 If a Project Manager or member of a Steering Committee is a contractor and also a partner or principal of a consulting firm, the department should refrain from hiring other contractors from the same company on the project. 	This will be a standard requirement in both the RFP and the resulting contract for this situation.	
Office of the Auditor General	3.70 We recommend the Department of Health develop and implement a plan to eliminate reliance on consultants serving as project managers and prohibit consultants from serving as members of RFP evaluation committees or project steering committees.	HBTS has three staff Project Managers who are working to capacity with existing projects. If projects are required which exceed existing staff capacity consultants will be required to augment staff. However, the default is to use existing staff whenever feasible.	Implemented
Office		Consultants have not served as members of RFP evaluation committees or project steering committees since the audit by OOC.	

Exhibit 3.1 – Summary of Recommendations (continued)

Source	Recommendations	Department's Response	Target Date for Implementation
	Other Findings – Compensation of Consultants		
Office of the Auditor General	3.81 We recommend the Department of Health develop and implement a plan to in-source all IT operation and maintenance functions over the next two years.	DOH has begun the insourcing of selected IT operation and maintenance functions by insourcing the team leads of the application teams. This began in December of 2011 and all team leads have been insourced since that date. DOH is also transitioning relevant infrastructure services to FacilicorpNB as feasible as well as selected maintenance contracts. DOH is developing a business case for submission to OHR [Office of Human Resources] for the insourcing of selected IT positions over the next two years. The capacity to implement the insourcing will be dependent on the ability of DOH to obtain positions, the classifications required to recruit specialized talent as well as efficient and effective recruitment processes.	Began in December 2011.

Exhibit 3.1 – Summary of Recommendations (continued)

Source	Recommendations	Department's Response	Target Date for Implementation
	Other Findings – Implications for the Rest of Government	Office of the Chief of Information Officer	
Office of the Auditor General	 3.85 We recommend the Office of the Chief Information Officer develop and monitor compliance with a government-wide policy relating to the procurement, contracting and management of IT consultants. That policy should address and mitigate risks regarding procurement and conflict of interest of consultants, and clearly state when the use of internal IT resources is more appropriate. As a minimum, the policy should require that: the primary role of IT consultants be to provide specialized expertise to government, typically for development initiatives; IT operations and maintenance work be in-sourced, with allowances made for knowledge transfer from private sector experts in the shorter term; a competitive bidding process, in compliance with all pertinent government legislation, be followed for the selection of consultants; any exemption from the competitive bidding process be properly authorized and made for sound business reasons defensible to the public; there is sufficient in house government expertise to effectively oversee and manage the work of consultants before a project is started; the opportunity for real or perceived conflict of interest on the part of contracted consultants is mitigated, in part by requiring that project managers, and members of key project committees be staffed exclusively with in-house resources; and provincial remuneration levels for IT staff not act as a barrier to the ability of government to hire and retain needed internal IT resources on a permanent basis. 	As we continue to establish the new Office of the Chief Information Officer, we will develop an IM [Information Management] and ICT [Information and Communications Technology] service, procurement-related, policy and in doing so will consider the risk findings raised in this audit. Once the policy is implemented, OCIO utilize a policy compliance process to monitor compliance.	Implement in 2013-2014 Q1

Detailed Observations Background

- 3.26 During 2009, concerns were brought to the attention of the OoC relating to the EHealth contracts administered by the Department. Specifically noted were potential conflicts of interest, concerns around the procurement process for professional services and possible deficiencies in contract management practices. OoC reviewed 15 of the 40 IT professional services contracts signed as of April 2009.
- **3.27** Based on its review, OoC concluded the concerns brought forward were valid. OoC made ten recommendations to the Department.
- 3.28 After the results of the OoC report were made public, we were approached by the Department to examine all 289 IT services contracts from 2005 to 2011 to determine if additional problems existed. These contracts were valued at \$108.5 million and are summarized in Exhibit 3.2.

Exhibit 3.2 - Summary of contract information

Contract type	Number of contracts	Amount (millions)
Original contract	114	\$78.4
Amendments to original contract	175	\$30.1
Total	289	\$108.5

3.29 Our work covered the six year period between 2005 and 2011. Departmental and government-wide policies, procedures and requirements changed over that time.

Audit Objective 1

3.30 Our first objective was:

to determine if the Department of Health complied with the Government procurement policy for purchases of services related to the E-Health initiative.

- **3.31** We used four criteria to assess this objective. They are listed in Appendix I.
- **3.32** The *Public Purchasing Act and Regulation* is the primary legislation covering all the procurement of IT services. The thresholds for purchase of services and

- associated processing procedures are documented in Appendix II.
- 3.33 There are also some internal policies and procedures at the Department which outline how IT service procurement should be processed. The details are provided in Appendix III.
- **3.34** During our testing, we found 57 instances of noncompliance in the procurement of IT services. They are summarized in Exhibit 3.3 below:

Exhibit 3.3 - Summary of non-compliance related to IT service procurement policy

Instances of non-compliance	Number of cases	Contract value (\$ 000s)
Requirement for exemption from competitive bidding process not met	15	\$4,945
Sole source exemption requirements not met	12	2,840
Only one quote obtained for contract under \$10,000	2	20
Insufficient documentation to support urgency exemption	1	2,085
Proper contract approval process not followed	12	11,133
Contracts started without valid purchase order	4	4,886
Evaluation process not documented properly	4	3,119
Contract approved after start of contract	2	371
Evaluation results not signed off by evaluation committee	2	2,757
	20	15 (55
Proper contract amendment process not followed	30	15,655
No properly prepared contract amendment	12	4,883
No change request form prepared	9	9,290
Reason for extension not on file	7	606
Purchase order not amended	2	876
Total issues identified	57	\$31,733

3.35 In addition, tendering files could not be located in three cases by the Department of Supply and Services which retains these files. All three files were from 2005 and past the seven year provincial retention period.

Requirement for exemption from competitive bidding process not met

- 3.36 The Department submitted 19 sole source exemption requests (total contract value: \$3.8 million) for approval by the Department of Supply and Services. The Department of Supply and Services approved six of these requests as specific skills exemptions instead and only 13 as sole source exemptions. We concluded in 12 of the 13 cases (total contract value: \$3.6 million) the sole source exemption requirements defined under the government policy were not met. Sole source exemption requests must be accompanied by a quote (cost estimate) from the supplier as well as a letter from the supplier indicating they are the only Canadian source of supply for the particular good or service being purchased. This letter was not present for 12 of the contracts deemed by the Department to be sole source exempt. The Department of Supply and Services (DSS) approved them as sole source exemption mainly because DSS had previous experience with the vendors and was confident that awarding the contracts to the vendors was a reasonable decision.
- **3.37** The typical rationale the Department documented for sole source requests included the following examples:
 - the particular firms or individuals have supported the department in past;
 - use of same tools implemented as standards in the department;
 - ability to shorten learning curve through prior experience; and
 - time restraints and contractor's knowledge of history of projects.
- justified a specific skills exemption (see the description in Appendix II) rather than the sole source exemption. In fact, the six specific skills exemption approved by the Department of Supply and Services were reasonable. However, the specific skills exemption is applicable only to contracts valued at less than \$100,000. Given most contracts were for amounts greater than \$100,000 sole source exemptions were requested. In the absence of a competitive procurement process, it is difficult to demonstrate the awarding of contracts to certain service providers was

- the most economical decision. Also, it introduces the opportunity for favoritism in the selection of vendors.
- 3.39 The other two issues noted in Exhibit 3.3 (i.e. "only one quote obtained for contract under \$10,000" and "insufficient documentation to support urgency exemption") appear to be isolated incidents.

Proper contract approval process not followed

- Another significant issue in our findings noted in 3.40 Exhibit 3.3 was that the Department did not always follow the documented procurement process. For example, the Department allowed the consultants to commence providing the contracted services without the official purchase order issued by the Department of Supply and Services. The issuance of a purchase order represents the final approval from the Minister of Supply & Services. We understand that an official purchase order may be issued a few weeks later than the signing of the contracts, due to the fact that the Department of Supply and Services may need the information from the final contract in order to prepare the purchase order. In one case from 2005, the purchase order was not issued until ten months after the contractor started the project.
- 3.41 The other two issues noted in Exhibit 3.3 (i.e. "evaluation process not documented properly" and "evaluation results not signed off by evaluation committee") appear to be isolated incidents.
- 3.42 Other examples where the Department did not follow documented policies and procedures included: changing the scope of work without preparing the required change order, amending a contract without preparing a contract amendment, and extending a contract without providing documented rationale to support the extension.
- **3.43** In all these examples, the Department indicated it was under pressure to move the projects forward as quickly as possible.

Proper contract amendment process not followed

- 3.44 According to the Department's internal policies, a change request must be prepared when an amendment to the scope of work, dollar value, term and/or addition of resources is required for a specific contract. The change request outlines the reasons for an extension. Therefore, it follows that contract amendments must be prepared where the purchase order has been amended through a change request.
- 3.45 We found 12 cases where the contracts were not properly amended following purchase order amendments. In such cases, the amended contract scope and terms were not clearly documented. All contract amendments are supposed to be signed by both the Department and the contractor. Therefore, in such instances the Department does not have a valid contract and is at risk in the event there is a dispute with the contracted IT firm regarding the work performed.
- 3.46 We also found nine cases where the change request form was not prepared and seven cases where the rationale to extend the contract was not documented although the change request form was on file. Without such documentation being available, we do not believe the decision makers in the Department could have made a reasonable assessment of whether to approve the requested changes.

Frequent amendments to original contracts

3.47 Often, contracts we examined were amended or extended after they were originally signed. As shown in Exhibit 3.4, 175 of the 289 contracts examined were amendments to original contracts. 67 out of the 114 original contracts (or 59%) had amending contracts. Therefore, these 67 contracts were amended an average of 2.6 times each after they were originally signed. In particular, one contract was amended eight times.

Exhibit 3.4 - Summary of contract information

Contract type	Number of	Amount
	contracts	(millions)
Original contract	114	\$78.4
Amendments to original contract	175	\$30.1
Total	289	\$108.5

We realize that it was the Department's normal practice to divide complex or large IT development projects into several phases, and the next phase was always treated as an amendment to the previous one. We also understand amendments were not totally avoidable, given the magnitude and complexity of some projects. However, during our testing we found 24 amendments valued at \$7.6 million for system maintenance and operation contracts. We believe for regular system maintenance and operation, as well as routine IT development projects, the Department should have been able to define the scope, deliverables, timelines and the costs to complete the work before entering into contracts. Changes to original contracts create a risk of project delays and cost overruns, and should be avoided wherever possible. We also noted that projected costs shown in original contracts are relatively lower than final costs actually incurred. It is our understanding that there is no competitive bidding process associated with contract amendments. Therefore a risk exists that contractors will understate their original bids with the expectation of recovering understated amounts in subsequent amendments where there is no competition. Once the Department has signed an original contract, it has essentially committed itself to a particular approach and is therefore unlikely to reject proposed amendments or extensions.

Conclusion on Objective 1

3.49 We identified 57 instances among the 289 contracts we examined where the Department of Health did not comply with the Government procurement policy for purchases of services related to the EHealth initiative. In particular, 15 exemptions did not meet the requirements of the *Public Purchasing Act and Regulation*. The Department did not properly follow the procedures to amend contracts in 30 cases. It did not comply with the government procurement policy for new contracts in 12 cases. However, we noted, in general, the processing and approval of contracts did improve over the period from 2005 to 2011.

Recommendations

3.50 The findings in the OoC's report are consistent with ours. Recommendations regarding the procurement process from the OoC's report are applicable to our findings as well. The OoC's

recommendations included:

- Contract managers should ensure that the requirements of the Public Purchasing Act are followed. Documentation should be maintained supporting Minister's exemptions particularly when the exemption for Specific Skills or Sole Source of supply is used.
- A purchase order should be obtained prior to the payment of any amounts and the value of the purchase order should not be exceeded.
- A signed statement of work should always be obtained prior to the commencement of the project.
- When contracts are negotiated and signed with vendors, only contracts drafted by PNB [Province of New Brunswick] should be utilized. Vendor contracts should not be used.
- 3.51 In addition to the recommendations made by the OoC, we recommend:
 - To avoid frequent contract amendments, the Department of Health adequately plan and define the scope, deliverables, timelines and costs for each IT contract and complete all required documentation before signing contracts or allowing work to commence; and
 - In the event contract amendments are required, the Department of Health properly prepare and approve change requests and amendments to original contract agreements.
- Update on the implementation status of OoC recommendations
- 3.52 The Department has put procedures in place to address the recommendations in the OoC's report. In 2011, the Department introduced new procedures to address sole source requests by creating a sole source checklist. The checklist is to be used with each sole source request to ensure all appropriate documentation is present in the file. The checklist requires the Branch Director, Assistant Deputy Minister, Deputy Minister and Minister's review and signature before it is forwarded to the Department of Supply and Services. These new procedures will help the Department standardize and streamline the sole source request process.

- 3.53 As previously discussed, we identified purchase order related issues in six cases during our testing. All six issues occurred from 2005 to 2009. We did not find similar issues after the OoC's report was released in 2010.
- **3.54** We noted other actions where the Department is addressing the OoC's recommendations:
 - the Department prepares an annual refresher communication for managers with respect to the requirements of the *Public Purchasing Act*; and
 - the Department now establishes commitment amounts upon receipt of a purchase order and tracks payments against the commitment.

Audit Objective 2

3.55 Our second objective was:

To determine if conflict of interest exists in the use of consultants/contractors.

- **3.56** We used four criteria to assess this objective. They are listed in Appendix I.
- 3.57 During the period under audit, the Department relied on consultants extensively for the EHealth initiative. The following three situations appear to have placed those external service providers in a conflict of interest position. Key findings are noted below with additional information presented in Exhibit 3.5:
 - the Department contracted consultants as project managers who were often managing their own firm's contracts and/or could access competitor information;
 - consultants were part of project evaluation committees tasked with recommending which consultants should be engaged for individual projects; and
 - a consultant was, for an extended period of time, a key member of the EHealth Steering Committee, a position of influence over governance and oversight of the overall EHealth initiative.

Exhibit 3.5 – Summary of conflict of interest

Description of conflict of interest	Time frame	Could the conflict of interest still occur?
Department contracted IT consultants as project managers:	Ongoing	Yes, but additional restrictions have significantly reduced the
IT consultants acted as project manager for 126 contracts which represents 52% of the 241 contracts for development projects.		risk of conflict of interest.
There were 11 contracts (for \$2.4 million) where project managers managed his/her own firm's contracts.		
There were 115 contracts (for \$35 million) where project managers could access information of competitors.		
Six consultants were part of an evaluation committee that recommended the preferred bidder when tenders were called for specific projects.	2005-2010	No, as the current policy prevents consultants from serving on the evaluation committee.
The evaluation committee members had access to the proposed technical solutions and fees. This would appear to lend an unfair advantage in competing for future IT projects.		
One consultant acted in a senior management role for the Department, as the individual was, for an extended period of time, an important member of the EHealth Steering Committee (i.e. the body governing the EHealth initiative).	March 2009 to July 2010	No, as this individual's contract expired and was not renewed. All current steering committee members are now permanent employees of the Department.
In this role, the individual had the potential ability to benefit the individual's firm and affiliated firms and have unfair advantage over other firms.		

Department contracted IT consultants as project managers

3.58 A project manager plays a vital role in the completion of an IT project. Departmental guidelines indicate:

The Project Manager is responsible for the overall management of the project on a daily basis to ensure that the project is completed on time, on budget and within scope. The Project Manager is also responsible for ensuring that the deliverables or product produced will meet the needs of the business community.

- 3.59 We found the Department contracted IT experts as project managers for 126 contracts which represents 52% of the 241 contracts for development type of IT projects. These 126 contracts were worth \$35.4 million. This created two distinct conflict of interest scenarios:
 - an external project manager managed a multicontract IT project where his/her own IT firm won contracts under the same project; or
 - an external project manager managed a multicontract IT project where IT firms other than his/her own firm worked on the project.
- 3.60 In the first scenario, the project manager approved timesheets and the work of their own firm on behalf of the Department. In the second scenario, the project manager could see the entire work of their firm's competitors which were contracted by the Department under the same project.
- **3.61** We also noted there were only three staff project managers who were involved in the EHealth initiative.

Consultants were part of the evaluation committee

3.62 We found that six consultants were part of a project evaluation committee which evaluated all proposals from different IT firms and recommended the winning proposal for the project. The evaluation committee members had access to the proposed technical solutions and fees. The concern is that the consultants involved in the evaluation committee would, at least in appearance, have an unfair advantage in competing for future IT projects.

A consultant was a key member of the EHealth Steering Committee

- 3.63 The primary function of the Steering Committee as per the Department "is to protect the investments being made in the initiative. This involves taking responsibility for the feasibility, business case and the achievement of outcomes of the project. The Steering Committee will monitor and review the project status, as well as provide oversight of the project deliverable rollout".
- 3.64 The Steering Committee is the key body within the governance structure of the EHealth initiative. It is responsible for critical business decisions associated with the initiative. This includes approving budgetary strategy, defining and realizing benefits, monitoring risks, quality and timelines, making policy and assigning resources, and assessing requests for changes to the scope of the project.
- 3.65 One consultant, from March 2009 to July 2010, was a key member of the EHealth Steering Committee. The major concern is that the consultant, the consultant's firm, and affiliated firms could benefit from this individual's unique position and have an unfair competitive advantage over other firms.
- 3.66 In our view, to eliminate conflict of interest, consultants should not perform management functions. There should be clear delineation between the roles of management and that of consultants. In implementing the recommendations of the OoC, the Department has made progress in this area. However, the Department should remove any potential conflict opportunities and avoid consultants being in a position of management influence.

Conclusion on Objective 2

- **3.67** We found there were many cases of conflict of interest in the use of consultants for the period 2005 to 2011 in the Department.
- 3.68 The Department relied extensively on consultants for senior and direct management roles including the EHealth Steering Committee, project management and in the evaluation process to engage further IT consultants. This was largely due to the fact the overall EHealth initiative was beyond the capacity of internal resources.

Recommendations

- **3.69** In general, the findings in the OoC's report were consistent with ours. The OoC's recommendations related to conflict of interest are applicable to our findings in this area as well. The OoC's recommendations included:
 - Employees and contractors should sign off as having read and understood AD-2915 (Conflict of Interest) on an annual basis. For employees, this could be incorporated as part of their annual performance review. As stated in AD-2915 employees must advise the Senior Executive Officer of any conflict of interest situation in which they find themselves. Documentation should be maintained.
 - Managers and directors should familiarize themselves with the meaning and definition of an "apparent conflict of interest". A suggested reading could be the document on this topic published by the Treasury Board of Canada Secretariat.
 - Contractors should not occupy management positions within the department. Where the situation is unavoidable, the contractor should be strictly limited to the financial information which they can access particularly with respect to competitor's information.
 - Where contractors are members of project steering committees, they should not take part in any discussions surrounding the contracting/outsourcing of any work for the project.
 - Contractors should be required to disclose business relationships with other contractors working in the department when a partnership or joint venture type relationship exists.
 - If a Project Manager or member of a Steering Committee is a contractor and also a partner or principal of a consulting firm, the department should refrain from hiring other contractors from the same company on the project.
- 3.70 In addition to the recommendations made by the OoC, we recommend the Department of Health develop and implement a plan to eliminate reliance on consultants serving as project managers and prohibit consultants from serving as members of

RFP [Request for Proposal] evaluation committees or project steering committees.

- **3.71** We noted the Department has put procedures in place to address the recommendations in the OoC's report.
- **3.72** However, the Department is still relying on external resources in some cases as project managers but with additional restrictions. For example, external project managers cannot see other firms' rates when they approve the timesheets for other firms' personnel and project spending.
- **3.73** The contractor's firm is not allowed to respond to a Request for Proposal, if he/she is part of the project evaluation committee or acting as a project manager for the project.
- 3.74 Additionally, the individual who was a key member of the EHealth Steering Committee is no longer with the Department. Their contract expired on 28 February 2011. Currently all members of the committee are internal permanent employees of the Department.

Other Findings Compensation of consultants

- 3.75 Project managers of the two largest multi-year projects under the EHealth initiative are consultants. The Department paid almost \$1.5 million to an IT firm for one project manager from 2005 to 2011. It paid another IT firm more than \$700,000 for a three year period from 2009 to 2012 for the other project manager. It also contracted a third consultant for ongoing system operation and maintenance support from 2006 to 2011 and paid more than \$1.2 million.
- 3.76 In total, this is over \$3.4 million paid to three consultants over six years, averaging more than \$200,000 per individual per year. In addition to the \$3.4 million the Department provided office space and equipment to contracted consultants.
- 3.77 In these three cases, we believe the use of consultants was significantly more costly to the Province than had this work been completed by Departmental staff (i.e. in-sourced). Typical salary and benefits for a senior project manager employed within government would be approximately \$120,000 per

- year. ¹ Therefore, there would be \$80,000 potential savings per year per full-time-equivalent employee from insourcing.
- 3.78 We were informed by Department officials there have been attempts to in-source some positions.

 However, those attempts were unsuccessful primarily due to the relatively lower compensation the Province offers in comparison with the private sector.
- 3.79 For systems development work, we believe outsourcing is appropriate where specific IT expertise is needed that does not exist within the civil service. However, as previously mentioned, we do not feel it is appropriate for consultants to serve as project managers, or members of project evaluation or steering committees.
- 3.80 In our opinion though, there are savings that could be realized by in-sourcing the performance of ongoing systems operation and maintenance work. Where the expertise to handle this work does not currently exist internally, the Department could contract consultants in the shorter term. Such contracts could provide both for the completion of necessary operation and maintenance work, and the transfer of knowledge to Departmental staff. This would allow responsibility for completion of this work to be transferred to less costly internal resources in the longer term.

Recommendation

3.81 We recommend the Department of Health develop and implement a plan to in-source all IT operation and maintenance functions over the next two years.

Implications for the Rest of Government

3.82 This chapter primarily involved the Department of Health, with limited additional work completed at the Department of Supply and Services. However, we were informed numerous times during our work that practices with respect to the use of IT consultants are similar elsewhere in government. This would imply

¹ Includes \$88,000 annual salary, 30% benefits, training and professional certificates

many of the procurement and conflict of interest issues our Office, and the OoC, identified in connection with the EHealth initiative may exist elsewhere in government.

- **3.83** Our Office may select other government departments, Crowns and agencies for similar audits in the future.
- 3.84 However, this is an area that should be addressed on an ongoing basis by government. From discussions with the Chief Information Officer (CIO) of Management Board, we understand that the role of his office will include setting government-wide policies for the procurement of IT resources. It will also include monitoring departmental activity to ensure that those policies are being complied with. Therefore, we have addressed the following recommendation to the Office of the CIO.

Recommendation

- 3.85 We recommend the Office of the Chief Information Officer develop and monitor compliance with a government-wide policy relating to the procurement, contracting and management of IT consultants. That policy should address and mitigate risks regarding procurement and conflict of interest of consultants, and clearly state when the use of internal IT resources is more appropriate. As a minimum, the policy should require that:
 - the primary role of IT consultants be to provide specialized expertise to government, typically for development initiatives;
 - IT operations and maintenance work be insourced, with allowances made for knowledge transfer from private sector experts in the shorter term:
 - a competitive bidding process, in compliance with all pertinent government legislation, be followed for the selection of consultants;
 - any exemption from the competitive bidding process be properly authorized and made for sound business reasons defensible to the public;
 - there is sufficient in house government expertise to effectively oversee and manage the work of consultants before a project is started;
 - the opportunity for real or perceived conflict of

- interest on the part of contracted consultants is mitigated, in part by requiring that project managers, and members of key project committees be staffed exclusively with in-house resources; and
- provincial remuneration levels for IT staff not act as a barrier to the ability of government to hire and retain needed internal IT resources on a permanent basis.

Appendix I: Audit Objectives and Criteria

Objective 1 - to determine if the Department of Health complied with the Government procurement policy for purchases of services related to the E-Health initiative.

Criteria

- Services are acquired in accordance with government's legislation, policies and procedures.
- Competitive selection processes are used, or the reasons for not doing so are supportable and properly documented.
- Contract extensions and amendments comply with government's policies and are adequately supported.
- Recommendations regarding procurement processes in the report of the Office of the Comptroller have been implemented.

Objective 2 - to determine if conflict of interest exists in the use of consultants/contractors.

Criteria

- The roles of a consultant/contractor should be clearly separated from the roles of management.
- The processes of awarding, extending or amending contracts comply with the Government Conflict of Interest Policy.
- Department staff and consultants/contractors comply with the government's Conflict of Interest Policy.
- Recommendations regarding conflict of interest in the report of the Office of the Comptroller have been implemented.

Appendix II: Summary of Relevant Legislation and General Government-Wide Processes

	Thresholds – Purchase of Services			
Up to \$10,000*	Departments buy directly from vendor. • Use good business practices (signed agreement/contract). • Obtain more than one quotation (should get 3 quotes whenever possible).			
Between \$10,000* and \$50,000*	Public Tender – Departments submit requisitions to Central Purchasing who will issue a Public Tender. Advertised on NBON [New Brunswick Opportunities Network] for at least 12 calendar days.			
Over \$50,000*	Public Tender – Departments submit requisitions to Central Purchasing who will issue a Public Tender subject to the Atlantic Procurement Agreement. Must be advertised on NBON for at least 17 calendar days (typically 20 to 25 days). Complexity of the procurement determines length of tender call.			
Award of Tender	When price is the only determining factor award will be made to the lowest bidder that meets the specification. The Purchasing Officer will recommend award to the Minister of Supply & Services. When evaluation criteria other than price has been established award will be made to the highest scoring proposal. An Evaluation Committee will review the proposals and prepare a detailed evaluation. The results of this evaluation will be forwarded to the Minister of Supply & Services for approval.			
Purchase Order	Once approval is received from the Minister of Supply & Services an official Purchase Order (PO) is issued to the successful bidder. The PO is forwarded to the client department and the services can be delivered. A copy of the contract must be provided to Central Purchasing for inclusion in the official file. Service is not to commence until PO has been finalized.			
Payment	It is the responsibility of the receiver of the services to process payments within 30 days of receipt of the service.			
*Taxes and in	*Taxes and incidental costs included			

- **3.86** The *Regulation 94-157* under *the Public Purchasing Act* sets out the criteria for the procurement of IT services which does not follow the normal competitive bidding process.
- **3.87** *Section 27.1 of the Regulation* requires that

requests for Minister's Exemptions must be made in writing to Central Purchasing. The Minister of Supply and Services may grant exemptions under the following circumstances:

- Specific Skills purchase of services with a total value of less than \$100,000 where it can be shown that for reasons of specific skills, knowledge or experience, the choice of vendor is limited to one or a very limited number of individuals, provided that the exemption is not used to unduly restrict competition.
- **Emergency or Urgency** where the supplies or services are required in the event of an emergency or urgent situation.
- Sole Source of Supply where there is an absence of competition for technical reasons and the supplies or services can be supplied only by a particular vendor and no alternative or substitute exists.
- **3.88** According to the Procurement Coordinator's Manual issued by the Department of Supply and Services, the procedure for Minister's exemptions are as follows:
 - sufficient documentation to support the exemption;
 - a request that indicates the section and paragraph of Regulation 94-157 under the *Public Purchasing Act* that allows that exemption;
 - a properly completed Supply Requisition
 - written approval by the Department's Procurement Coordinator;
 - for a sole source exemption as listed in section 27.1 paragraph (f) in Regulation 94-157, the request must be accompanied by a quote and a letter from the supplier indicating that they are the only Canadian source of supply for the particular good or service being purchased; and
 - a purchase order will be issued to the client department to confirm the approval of the exemption.

Appendix III: The Relevant Department of Health Internal Policies and Procedures

General process for contract approval

3.89 The Contract Coordinator prepares the contract checklist. The Executive Director of E-health and the Director of Information Technology Services (ITS) signs all the contract checklists before they leave the branch. Legal personnel signs off on the contract checklist, following their review of the file and forwards the contract folder to Financial Services for their review. The Assistant Deputy Minister of Corporate Services then reviews and approves the file, and moves the folder forward for approval and signature by the Deputy Minister.

Process for a contract change request

3.90 When there is a need to amend the scope of work, dollar value, term and/or addition of resources is identified in a project contract, the project manager must prepare a change request. The change request outlines the reasons for the request, the implications to the project and the financial ramifications, including whether or not this is within the project budget. The change request requires the signature of the Business Owner of the project and the project manager or Director.

Approval of a contract change request

3.91 Change requests require the approval of the EHealth Steering Committee or another approving body for ITS. All project related change requests need to be forwarded to the Director one week in advance of the EHealth Steering Committee meeting for distribution and review by the committee members. Once approved by the committee, the Executive Director signs the change request to indicate this approval.

Purchase order and contract amendment

- **3.92** An approved change request is required before the branch can proceed with the purchase order and contract amendment.
- 3.93 The Director of Contract Management and Corporate Support Services reviews the request, approves or denies the request, and forwards it to the Department of Supply and Services to issue an amended purchase order.

General process for amendments to contracts and purchase orders 3.94 The Contract Coordinator prepares the contract checklist. The Executive Director of E-health and the Director of ITS signs all the contract checklists before they leave the branch. Legal personnel signs off on the contract checklist, following their review of the file and forwards the contract folder to Financial Services for their review. The Assistant Deputy Minister of Corporate Services then reviews and approves the file, and moves the folder forward for approval and signature by the Deputy Minister.

Chapter 4 Department of Environment and Local Government Solid Waste Commissions

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Chapter 4 Solid Waste Commissions

Department of Environment and Local Government Solid Waste Commissions

Introduction

Environmental and Other Impacts of Solid Waste

4.1 Solid waste commissions provide a service that is used by every taxpayer in New Brunswick and is critical to the environment of the Province. Improper disposal of solid waste contributes to soil and water contamination, and the accumulation of greenhouse gases in the atmosphere. Proper treatment of solid waste, including diversion of materials where appropriate, can minimize these negative environmental impacts.

New Brunswick Solid Waste Commissions



Legend		
T	Transfer Station	
L	Landfill	
D	Direct Ship	

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Solid Waste Commissions

4.2 When regionalization was implemented, six regional solid waste commissions decided to open sanitary landfills. Regional commissions were heavily involved in deciding where landfills would be located within their region. The Province was also involved in determining the number and regional locations of these landfills. COGERNO, Nepisiguit-Chaleur, Fredericton, South-West, Fundy, and Westmorland-Albert all operate landfills. The other six commissions entered into agreements to transfer solid waste from their regions to landfills operated by adjacent commissions. Five of the six other commissions established transfer stations. (i.e. central collection facilities used to facilitate the efficient transfer of solid waste to the appropriate landfill.) The sixth, Northumberland, direct ships its solid waste to a landfill.

- **4.3** Operation of a solid waste commission typically includes:
 - operating a landfill or transfer station(s);
 - collecting/sorting/diverting certain materials including recyclables, reusable items, and household hazardous wastes (e.g. paint, batteries, etc.);
 - conducting on-site composting, and/or facilitating backyard composting by residents;
 - operating gas management systems; and
 - educating the public about solid waste.
- 4.4 Appendix I provides more detail about individual solid waste commissions, their operations, and the communities they serve. Pertinent provincial legislation and Department of Environment and Local Government involvement with provincial solid waste matters is discussed in Appendix II. Appendix III provides information about two key provincial solid waste stakeholders, Recycle NB and the NB Solid Waste Association.

Why We Completed this Review

4.5 In December 2009, our Office received a letter from the Minister of Environment, Rick Miles, which included the following request:

We understand you are currently reviewing the Water and Wastewater Commissions. We feel an undertaking of the Regional Solid Waste Commissions (RSWC) would be timely. ... The

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department would welcome recommendations from your office.

- **4.6** We subsequently decided to proceed with a review of regional solid waste commissions given:
 - the request by the Minister of Environment;
 - the importance of the services provided to New Brunswick citizens by solid waste commissions;
 - the potential impacts of solid waste on the provincial environment;
 - the significant findings we made as a result of our review of provincial water and wastewater commissions, and in particular the Greater Moncton Sewerage Commission, as included in our 2011 Report; and
 - it would serve as a follow up to the Solid Waste Management Program section included in our 1994 Report.

Objective

4.7 The objective of our review was:

To assess the adequacy of the governance and oversight structures and processes for New Brunswick solid waste commissions.

Conclusion

4.8 We have concluded that at the time of our review, in general, governance and oversight structures and processes for New Brunswick solid waste commissions were adequate, and functioning as documented in provincial legislation.

Results in Brief Governance

- 4.9 The Regional Service Delivery Act was passed on 13 June 2012. It will be administered by the Department of Environment and Local Government (the Department). Effective 1 January 2013, twelve regional service commissions will be created in the Province under that legislation. Also, on that date existing solid waste commission boards will be dissolved and replaced by regional service commission boards. A replacement for the current Solid Waste Commission Regulation will be developed in 2013.
- **4.10** We are generally pleased with the quality of governance that has been provided by the various commission boards around the Province, and by Department of Environment and Local Government administrative oversight of regional solid waste commissions.

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4.11 Section 3(3) of the current Solid Waste Commission Regulation, under the *Clean Environment Act*, gives a veto to large municipalities within a particular region relating to certain board approvals. This has caused difficulties for certain commissions when electing executive members to their boards. It also creates the risk of an impasse in approving an annual budget or needed borrowing. This issue will have to be addressed in drafting the new regulation under the *Regional Service Delivery Act*.

- 4.12 Several commissions and other stakeholders indicated that the Department of Environment and Local Government has been very slow in filling vacant board positions representing local service districts. It is our understanding that these appointments, where possible, will be made by representatives of local service districts rather than the Minister of Environment and Local Government under the new *Regional Service Delivery Act*. However, the Minister may still be called upon to appoint some board representatives in regions where there are not enough local service district advisory committees in place.
- 4.13 We identified a number of good governance practices in our review of provincial solid waste commissions. However, we did note that solid waste commissions typically do not maintain the type of governance documentation recommended by the provincial *Appointment Policy* document. In addition, a number of the solid waste commissions indicated that they do not provide formal orientation sessions for new board members

Commission Tipping Fees

4.14 Tipping fees (charges typically dollars per ton, to dump waste at a landfill transfer station) vary significantly between the twelve regional solid waste commissions. This is as a result of different costs to establish regional facilities, differences in the extent of diversion and waste treatment programs offered, the level of commission borrowings, and other factors. Those commissions with relatively lower fees may have more flexibility to add additional programs or enhance existing ones.

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Arrangements Between Transfer Stations and Landfill Commissions

- 4.15 Service and related financial arrangements between transfer station and landfill commissions are governed by signed service agreements. Landfill commissions typically charge their full tipping fees to the transfer station commissions that use their landfills. However, regional tipping fees charged by landfill commissions are intended to recover direct costs of operating their landfill and associated administration costs, along with the costs of regional diversion and education programs, and other regional costs unrelated to landfill operations. Many transfer station commissions operate diversion and education programs within their own regions. By paying full landfill commission tipping fees, non-landfill commissions are contributing to the diversion and education programs run by landfill commissions and receiving no benefit. Given the legislative requirement that provincial solid waste commissions operate on a non-profit basis, we believe it is inappropriate for landfill commissions to make a profit through transfer agreements with other provincial solid waste commissions.
- **4.16** Transfer Station Commissions do not always transfer their solid waste to the nearest landfill. This may result in higher than necessary costs being incurred by those commissions.

Commission Websites

4.17 The Internet now serves as a primary source of information for many New Brunswick residents. For that reason, we believe that it is important that all commissions provide complete and up-to-date accountability information on their websites. (i.e. Annual reports, financial statements, lists of current board members, comparison of actual diversion of solid waste against plans, and other pertinent information) However, we concluded from our review that this accountability information is not presented on most commission websites.

Observations on Operations Reporting, and Financial Management

- **4.18** Other observations we made during our review included:
 - All twelve commission budgets were balanced, as required, for 2011;
 - All twelve commissions appeared to be acting within their legislative mandates;
 - Financial and operational reporting provided by the

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- twelve commissions appeared to be in compliance with legislative requirements;
- We identified no unusual financial statement items during our review of commission financial statements;
- Post-closure reserves established by the six landfill commissions were generally fully funded; and
- Other reserves established by individual commissions (i.e. for Operations, Capital, and/or Generation Facilities) appeared to be reasonable.

Other Findings

- **4.19** We identified a number of areas related to solid waste in which we believe the Department has an important role to play in improving provincial environmental performance. These areas include:
 - Extended Producer Responsibility (EPR) Programs;
 - Diversion of Solid Waste;
 - Illegal Dumping;
 - Monitoring of Construction and Demolition Debris (C&D) disposal sites; and
 - Public Education.

Extended Producer Responsibility Programs

- **4.20** Extended Producer Responsibility (EPR) programs result in the diversion of specific types of solid waste before it goes to solid waste commissions by requiring original producers, or first importers, to accept it back and cover costs associated with its recycling, reuse, or disposal. Departmental representatives, commissions, and stakeholders agree that EPR programs have the most potential to reduce the amount of solid waste going to landfills in the future.
- **4.21** Recycle NB, a provincial agency, currently administers two programs for the Province, the Tire Stewardship Program and the Paint Stewardship Program. The Paint Stewardship Program is the first and only legislated EPR program in New Brunswick.
- 4.22 However, legislated EPR programs proposed by the Department covering used oil, glycol, and e-waste have not yet been approved by government or implemented. The Department also indicated that additional EPR programs, for example covering packaging and printed material, could have a large impact in reducing the amount of solid waste going to provincial landfills.

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Diversion of Solid Waste

- **4.23** There has not been a provincial solid waste diversion plan (a process to divert waste from landfills) in place since the last one expired in 2005.
- 4.24 The Department has been working towards a reduction of 50% of 1988 landfill volumes. However, Departmental figures show the Province has never reached that level, and after reaching 43.7% diversion in 2002 had fallen back to 36.0% by 2009. The overall per capita diversion rate in New Brunswick is the highest among Canadian provinces, but this appears to result primarily from strong non-residential diversion of organic waste. Residential recycling is weak in comparison with national averages. Canadians on average recycle 131 kilograms of solid waste per person each year, while New Brunswickers recycle only 83 kilograms according to 2008 Statistics Canada figures.
- 4.25 The Department has typically allowed regional solid waste commissions to make their own decisions as to the diversion programs they will offer. Commissions are expected to self-fund these programs. The additional costs have a direct effect on regional tipping fees, and ultimately municipal property tax rates. Consequently, budgets including such programs are unlikely to be approved by local municipalities, unless there is strong public support for a particular diversion program within a region, or it is supported through provincial standards and/or funding. Provincial financial support for regional diversion programs is currently limited to short-term funding available from the Environmental Trust Fund.

Illegal Dumping

4.26 The Department, solid waste commissions, and stakeholders all agree that illegal dumping is a significant problem in the Province. The New Brunswick Solid Waste Association, through its illegal dumping hotline, recorded approximately 1,000 reported cases of illegal dumping between 2007 and mid 2011. The *Clean Environment Act* does provide for significant fines, and the Department has a compliance and enforcement policy in place which provides for escalating steps to be taken to enforce the Act. The Department focuses on ensuring illegal dumpsites are cleaned up, and has issued four recent

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Orders, involving three illegal dumpsites, to responsible parties and/or landowners to that end. Two of these resulted in prosecutions, guilty pleas, and fines being issued. Departmental representatives indicated that it can be difficult to obtain sufficient evidence to successfully prosecute illegal dumpers under the *Clean Environment Act*. However, both prosecutions noted above were of illegal dumpers, not landowners.

Monitoring of Construction and Demolition Debris Disposal Sites 4.27 The Department has permitted the establishment of approximately ten private construction and demolition debris (C&D) disposal sites at various locations around the Province. Permitting such dumpsites appears to contradict the original goal of regionalizing solid waste treatment in the Province. However, the Department indicated that it is done as a convenience to industry, and particularly to reduce the risk that illegal dumping of construction and demolition materials will occur. These dump sites are not required to capture leachate or greenhouse gases. Therefore any dumping of unapproved materials (i.e. violation of their Certificate of Approval to Operate) at those sites could have negative environmental consequences (e.g. on nearby groundwater).

Public Education

4.28 Both the Department and solid waste commissions have recognized the value of educating the public about the importance of effective solid waste management, and related programs available in New Brunswick. The Department has relied heavily on individual commissions to educate the public in their respective regions. Commissions appear to have taken this role seriously, offering various educational programs. However, the extent of education programs offered by individual commissions will necessarily relate to the willingness of their regional municipalities and local service districts to continue to fund such programs through tipping fees. There may also be some areas where it is more effective and/or efficient to educate the public through province-wide initiatives.

Recommendations

4.29 Our recommendations are found in Exhibit 4.1.

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Exhibit 4.1 - Summary of Recommendations

Recommendations	Department's Response	Target Date for Implementation
4.49 We recommend the Department of Environment and Local Government include a dispute resolution mechanism in the planned Solid Waste Commissions Regulation under the Regional Service Delivery Act to address situations where a commission board has been unable to obtain the two-thirds majority needed to approve an annual budget, commission borrowing, or the election of board officers.	The Department has taken the position that the Boards of the new Regional Service Commissions will have the responsibility for dispute resolution in their overall management mandate. The new Regional Service Delivery Act includes a double two-thirds majority (two-thirds of the Board members present who represent at least two-thirds of the total population represented by all the members present) for decisions regarding the approval of the annual budget, Commission borrowing and the setting of fees. The double two-thirds requirement will not apply to the election of Board officers for the Regional Service Commission. It is important to note that in extreme circumstances, the new legislation does provide a means whereby the Lieutenant Governor in Council could appoint a trustee if, in the opinion of the Minister of Environment and Local Government, a Regional Service Commission Board [RSC] was not functioning effectively, the RSC Board failed to fulfill its responsibilities under the Act and regulations or where it was in the public interest.	The Regional Service Delivery Act received Royal Assent in June 2012 and the Regional Service Commissions will be in place as of January 1, 2013
4.51 We recommend the Province, through the Minister of Environment and Local Government, ensure future appointments of local service district representatives to the new Regional Delivery Commission boards are made within three months of a vacancy occurring.	The Department agrees that appointments to Regional Service Commission Boards should be made in a timely manner. The new Local Service District [LSD] Representation Regulation specifies that representatives of the Local Service Districts on the Regional Service Commission Boards are to be selected by and from among the Chairpersons of the LSD Advisory Committees within the regions. In addition, this regulation allows for the election of a new LSD Board member representative by the existing LSD Advisory Committee Chairpersons in cases where a current member is no longer able to serve in this capacity. As well, the Minister shall only become involved in the appointment process in instances where there are not enough LSD Chairpersons available or interested to serve on the Board. In instances where an LSD member is not able to fulfill his or her duties as a Board member, a previously selected alternate will be able to replace him or her on a temporary basis.	The Local Service District Representation Regulation (Regulation 2012-90) is now in effect.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
 4.58 We recommend each new Regional Delivery Commission adopt the following good governance practices: document the roles and responsibilities of their board, individual board members, and board executive members; document and approve terms of reference for each of their board committees; provide all new board members with orientation sessions; document a code of conduct for board, management and staff; and create a governance committee of the board to oversee the development and implementation of good governance practices. 	The Department agrees that good governance practices are essential for the new Regional Service Commissions. Improved governance provisions enacted for water and waste water commissions per the AG recommendations have been mirrored in the Regional Service Delivery Act. Each Regional Service Commission will be required, by legislation, to adopt a procedural by-law aimed at establishing, from the outset, good governance and operational practices. To this end, the Department has developed a template procedural by-law that the Regional Service Commissions may use and adapt for their respective organizations. The procedural by-laws will address such matters as board member responsibilities (and for Board Executive members), committee structure and responsibilities, meeting protocols and rules of conduct and various other matters relating to the operational and governance requirements of the Regional Service Commissions. In terms of orientations for new Board members, the Department will be working with the Regional Service Commissions and their staffs to develop and provide various training and information resources. Furthermore, the Department will encourage the Commissions to ensure that new Board members are provided with orientation materials and information to help them adjust to their new roles and responsibilities. As for the matter of establishing a governance committee of the Board to oversee the development and implementation of good governance practices, it is our view that this function is best handled at the Board level rather than it being delegated to a particular Committee. Having said this, the Regional Service Commissions will have the flexibility to establish committees as they feel appropriate for their circumstances. The Department will encourage the Regional Service Commissions to actively work with one another in the sharing of best practices, which could include the development of such resources as a code of conduct, among others.	Interim Boards are now in the process of establishing procedural by- laws and they are expected to be in effect in January 2013.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
 4.65 We recommend all commissions provide up-to-date accountability information on their websites including, as a minimum, the following: audited financial statements; annual reports; current commission tipping fees; and the names of board members indicating which local government they represent. 	To ensure a high degree of accountability and transparency from the Regional Service Commissions, the Department is proposing to require, via the General Regulation, that the following be included in their Annual Reports: Audited financial statements Progress on all common services Identification of and reporting on all voluntary services provided Reporting on any services provided outside of the regional service commission boundary Identifying all communities receiving land use planning services from the commission Total number of commission Board meetings held each year and Board attendance Performance measures that have been established by the Board and report on progress in relation to those measures Board member expenses Board member per diems The Department is also proposing that the General Regulation require the Regional Service Commissions to post on their web sites their annual reports, solid waste tipping fees, other fees and Board member names.	The Regional Service Delivery Act - General Regulation is expected to be in place in January 2013.

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.79 We recommend commissions negotiating solid waste transfer agreements in future consider:	The Department agrees that all Regional Service Commissions should become fully aware of all fees and costs when negotiating and signing contracts.	On-going
 what direct and administrative costs are being incurred by landfill commissions in providing service to transfer station commissions; and how these costs may be most fairly allocated in establishing landfill tipping fees under the agreement. 		
4.80 We recommend Transfer Station Commissions investigate the potential for cost savings by shipping their solid waste to alternative provincial landfills, prior to renewing their existing transfer agreements.	The Department agrees that Regional Service Commissions should always explore cost saving measures in their oversight for management of solid waste in their respective regions.	On-going
4.99 We recommend the Department finalize and request government approval for additions to the Designated Materials Regulation covering used oil, glycol, and ewaste.	The Department agrees and wishes to report that as of October 31, 2012 the Designated Materials Regulation has been amended to include used oil and glycol. Departmental efforts are ongoing to include e-waste and tires, including highway and off the road tires.	2012-13

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.100 We also recommend the Department design and implement additional extended producer responsibility programs to further reduce the volume of solid waste going to New Brunswick landfills.	The Department agrees and is currently exploring additional products that may be able to be designated under the Designated Materials Regulation.	On-going
4.122 We recommend the Department ensure challenging diversion goals are set for regional commissions. The Department should also monitor commission performance and ensure the degree of success by individual commissions in achieving their diversion goals is publicly reported. One option may be for commissions to report their diversion performance on their websites.	The Department supports continuous improvement on waste diversion. The Department has received 5 year waste diversion plans and will be working with and monitoring the Regional Service Commissions efforts to strive for increased waste diversion. The Department agrees with the OAG recommendation that the commissions report their diversion performance on their websites.	On-going
4.123 We also recommend the Department support the delivery of enhanced diversion programs by regional solid waste commissions to help them meet their diversion goals.	The Department agrees to support the Regional Service Commissions in their efforts to deliver programs that enhance waste diversion.	On-going
4.135 Given the environmental risks and financial costs associated with illegal dumping, we recommend the Department develop a standardized compliance and enforcement approach to better manage illegal dumping in the Province.	The Department agrees and is currently examining approaches to a new enforcement and compliance standard regarding illegal dumping.	2013

Exhibit 4.1 - Summary of Recommendations (continued)

Recommendations	Department's Response	Target Date for Implementation
4.139 We recommend the Department ensure all construction and demolition debris disposal sites in the Province are physically inspected periodically to ensure they are accepting only materials specified in their Departmental certificate of approval to operate and identify and address other environmental concerns. Frequency of inspections of individual sites should be based upon a Departmental evaluation of the risk of non-compliance at individual disposal sites.	The Department agrees. The Department has an established compliance inspection audit policy that identifies a percentage of approvals/operations that are physically visited and inspected on an annual basis. Additionally, any sites that are identified as an immediate potential concern are inspected following the Department's Compliance and Enforcement Policy.	On-going
4.145 We recommend the Department develop and implement a plan, in agreement with individual commissions, covering ongoing government involvement in educating the public about solid waste matters. That involvement should focus on areas of province-wide concern.	The Department agrees and will continue to support the Regional Service Commissions and other stakeholders to educate the public with regards to solid waste matters.	On-going

History of New Brunswick solid waste processing

4.30 In 1998, New Brunswick became the first Canadian province to have closed all of its old dumpsites and moved to a system of regional sanitary landfills. The website of the Fundy Region Solid Waste Commission provides an excellent summary of this change. It also indicates that the regional approach was primarily introduced as a means of improving provincial environmental performance. Excerpts from the website follow:

During the late 1970's and early 1980's, many solid waste dumping sites in New Brunswick were reaching capacity. Over 300 dumps were scattered across the province, operated by the New Brunswick Department of Transportation, municipal government, or private owners. ... The search for new disposal sites was a lengthy and tedious process. Residents of areas adjacent to proposed sites attended public meetings in great numbers to express concerns ... As a result of the public outcry, the province became committed to finding a new direction for solid waste management in New Brunswick. ... A five-member task force ... conducted seven public consultation programs throughout the province ... three broader principles were offered as overriding concerns, which were intended to guide the future development of all components within New Brunswick's comprehensive waste management program. ...

- Public safety and environmental protection must be the primary considerations, at all times, in the planning and operation of all waste management programs.
- Effective public consultation and involvement in planning and implementation of new waste management systems in the Province are absolute prerequisites for success. To secure confidence, the public must have an opportunity to play a meaningful role in decision-making and overseeing the future operation of the system to ensure that public health and environment concerns receive

maximum consideration.

• All governmental agencies in the Province must comply, and be seen to comply, with the New Brunswick Government's Environmental Acts and Regulations. ...

The residents of New Brunswick expressed the need to promote the establishment of environmentally acceptable and cost effective waste management systems, concentrating available resources in several large-scale regional projects rather than smaller sites. Under the Province's new approach, regional commissions were established and given direct responsibility for all aspects of solid waste management in their respective areas.

... All Solid Waste Commissions include representatives from each municipality, unincorporated area, and Indian band within its region. Each of the Commissions is charged with the responsibility of developing and implementing a regional solid waste program.

...The user pay approach gave each of the Commissions the financial means for both the planning and operation of a solid waste strategy.

4.31 Completion of our review included the following procedures:

- surveying all twelve solid waste commissions in the Province about their governance, financial management, and operations;
- interviewing general managers and board chairs from a representative sample of six commissions including the Fredericton Region Solid Waste Commission, the Fundy Region Solid Waste Commission, the Westmorland-Albert Solid Waste Corporation, the Northumberland Solid Waste Commission, the Valley Solid Waste Commission, and the Nepisiguit Chaleur Solid Waste Commission;
- canvassing the communities served by these six commissions to get their input/observations

Scope

- relating to the governance, accountability, and financial management of their commission;
- reviewing and analyzing annual budgets, audited financial statements, policies, and other documents provided by the commissions;
- holding discussions with representatives of the Department of Environment and Local Government, and reviewing documents they provided;
- holding a discussion with a representative of the New Brunswick Solid Waste Association; and
- completing research relating to solid waste processing in New Brunswick, the results of similar reviews and audits conducted in other jurisdictions, and various governance matters.

Upcoming Structural Changes to Regional Service Delivery

- **4.32** A Government of New Brunswick news release dated May 30, 2012 indicated the following:
 - ...we have brought forward legislation to create twelve regional service commissions... The Regional Service Delivery Act...The Legislation would:
 - divide the province into twelve regions for service delivery, including a range of required common services;
 - establish a commission for each region, which would be governed by a board of directors comprised of; the mayor of every municipality and rural community; and representatives of local service districts; and allow for and encourage communities to collaborate on additional, voluntary services.
- **4.33** Included in these new Regional Service Commissions will be the current solid waste commissions, along with regional planning commissions, and other public sector regional service providers.
- 4.34 The *Regional Service Delivery Act* was passed on 13 June 2012. Effective 1 January 2013, twelve regional service commissions will be created in the Province under that legislation. Also, on that date existing solid waste commission boards will be dissolved and replaced by regional service commission boards. The current Regulation for Solid Waste Commissions (96-11) will be repealed in 2013. At that

time, solid waste management will be covered under the new Act and an accompanying regulation that is to be developed.

4.35 We became aware of this change while completing our work, and have taken it into account in formulating the recommendations included in this report.

Detailed Findings General

- **4.36** There are a total of twelve solid waste commissions in the Province of New Brunswick. Provincial oversight of the commissions is provided by the Department of Environment and Local Government (the Department).
- 4.37 As part of our review, we canvassed regional municipalities for six of the twelve solid waste commissions to get their feedback on governance, financial management, and operations of their regional solid waste commissions. Comments were generally quite positive about governance and financial management, although some concern was expressed about the quality and extent of diversion programs offered. However, overall municipal satisfaction appeared to be quite high.
- **4.38** Exhibit 4.2 presents some general and financial information about the twelve provincial solid waste commissions. General information is as provided by the commissions during mid 2011. Financial information was taken from 2010 audited financial statements unless otherwise indicated.

 ${\it Exhibit~4.2-Solid~Waste~Commission-General~and~Financial~Information}$

Commission	Date of Incorporation	Operation	Number of Staff (est. FTEs as of Spring 2011)	Revenues (millions)	Total Assets (millions)	Reserve Fund(s) (December 31) (millions)
COGEDES*	1995	Transfer Station	5	\$3.0	\$0.4	\$0.1
COGERNO*	1995	Landfill	22	\$3.6	\$22.9	\$1.4
Fredericton Region**	1985	Landfill	41	\$5.8	\$24.6	\$2.3
Fundy Region**	1995	Landfill	34	\$8.7	\$59.4	\$1.7
Kent**	1993	Transfer Station	1	\$1.4	\$0.4	\$0.2
Kings*	1994	Transfer Station	0.5	\$0.3	\$0.2	\$0.0
Nepisiguit Chaleur*	1987	Landfill	23.5	\$4.2	\$33.8	\$1.2
Northumberland**	1995	Direct Hauling	2.5	\$1.8	\$1.5	\$0.5
Restigouche*	1995	Transfer Station	4.5	\$0.3	\$0.5	\$0.1
South-West**	1996	Landfill	21	\$3.3	\$15.4	\$2.3
Valley**	1995	Transfer Station	1	\$1.9	\$0.5	\$0.2
Westmorland- Albert*	1992	Landfill	139	\$12.2	\$42.9	\$2.9

 $FTE = Full \ time \ Employee$

Governance

4.39 Exhibit 4.3 presents general governance information relating to the twelve provincial solid waste commissions. Information was provided by the twelve commissions as of mid 2011 unless otherwise indicated.

Exhibit 4.3 – Governance Information

Commission	Number of board members	Appointment Date of Longest Serving Member	Appointment Date of Newest Member	Annual General Meeting Held?	Date Bylaws Last Updated
COGEDES	17	2002	2011	Yes	2004
COGERNO	18	2003	2011	Yes	1996
Fredericton Region	15	2001	2011	Yes	2007
Fundy Region	9	2002	2010	Yes	2010
Kent	10	2004	2009	Yes	2008
Kings	7	2010*	2011*	Yes	2005
Nepisiguit Chaleur	10	2005*	2012*	Yes	2009
Northumberland	10	2004	2010	Yes	2009
Restigouche	11	2009*	2011*	Yes	1996
South-West	13	2002	2010	Yes	2006
Valley	13	2005	2010	Yes	2000
Westmorland- Albert	18	2009*	2012*	Yes	2002
* Information provided by commission as of September/October 2012.					

^{*} Data from 2009 audited financial statements

^{**} Data from 2010 audited financial statements

- **4.40** The *Clean Environment Act* provides the following appointment process for provincial solid waste commissions.
 - 15.4(1) The membership of a regional solid waste commission shall be as follows:
 - (a) one member for each participating municipality, appointed by the municipality that the member represents;
 - (a.1) one member for each participating rural community, appointed by the rural community that the member represents;
 - (b) not more than four members representing the participating unincorporated areas, other than participating Indian reserves, appointed by the Minister; and
 - (c) not more than one member representing the participating Indian reserves, appointed jointly by the band councils of the reserves...
 - 15.4(4) A member of a regional solid waste commission may be reappointed, but no person shall serve more than three consecutive three-year terms as a member.
- 4.41 Based upon our review of lists of board members provided by the commissions, we are comfortable that this appointment process is being complied with. We would note that the current process does result in overly large boards in some cases due to the representative nature of appointments. Size varies based on the number of participating municipalities within a particular region. Municipalities who responded to our request for feedback were generally pleased with the current governance model for solid waste commissions. This included some of the same municipalities who expressed concerns about the governance system for water and wastewater commissions, as included in our 2011 Report.
- **4.42** Commission boards typically meet on a monthly basis, except during the summer months and hold annual general meetings attended by various commission stakeholders. All commissions have

bylaws in place, although we would encourage those commissions that have not revised them recently to review their bylaws in the near future to ensure they are up to date.

4.43 From our review, we identified a few concerns relating to the governance of solid waste commissions. They are covered in the sections that follow.

Board Approval of Annual Budgets, Borrowing, and Election of Executive Officers

- **4.44** Simple majority rules voting applies to most decisions made by solid waste commission boards.
- **4.45** However, Section 3(3) of the Solid Waste Commission Regulation, under the *Clean Environment Act*, provides for the following exception:

A motion made at a meeting of a regional solid waste commission to approve an annual budget for the commission, to approve the borrowing of money or to elect an executive officer shall not pass unless at least two-thirds of the members of the commission present, who represent at least two-thirds of the total population represented by all the members present, vote in favour.

- **4.46** This section effectively gives a veto over these decisions to large municipalities within a region due to the requirement for two-thirds of population to be represented by members voting to approve. Our understanding is that this section was included in recognition of the large proportion of funding provided to particular commissions by single large municipalities within their region.
- 4.47 Unfortunately, this section has resulted in difficulties for some boards, particularly in electing executive members of their boards. (e.g. Fundy Regional Solid Waste Commission was unable to elect a board vice-chair on two occasions.) There is also a risk of an impasse in approving an annual budget or needed borrowing. Consequently, some commissions indicated they would like to see this section deleted from the Regulation. However, a former Minister of Environment indicated, in response to a letter from one of the commissions, that government had no plans to make changes to the existing Regulation.

4.48 Our concern is that the existing Regulation does not seem to provide a dispute resolution mechanism in the case where an impasse is reached. Therefore, there is a risk that a commission could become unable to function, for example in a case where the board was unable to reach a consensus on a proposed budget or required borrowing. Given that a new regulatory framework will be established over the next year, pursuant to the new *Regional Service Delivery Act*, we believe that the Department should address this risk in developing that framework.

Recommendation

4.49 We recommend the Department of Environment and Local Government include a dispute resolution mechanism in the planned Solid Waste Commissions Regulation under the *Regional Service Delivery Act* to address situations where a commission board has been unable to obtain the two-thirds majority needed to approve an annual budget, commission borrowing, or the election of board officers.

Appointment of Board Members

4.50 Several commissions and other stakeholders indicated that the Department has been very slow in filling vacant board positions representing local service districts. It is our understanding that these appointments, where possible, will be made by representatives of local service districts rather than the Minister under the new Regional Service Delivery Act. However, the Minister may still be called upon to appoint some board representatives in regions where there are not enough local service district advisory committees in place.

Recommendation

4.51 We recommend the Province, through the Minister of Environment and Local Government, ensure future appointments of local service district representatives to the new Regional Service Commission boards are made within three months of a vacancy occurring.

Governance Best Practices

4.52 The government document Changing the way appointments are made – An Appointment Policy for New Brunswick Agencies, Boards and Commissions, in addition to detailing the new merit-based policy for Crown agency board appointments, also includes

reference to a number of good governance practices.

- **4.53** In particular it covers areas such as:
 - 1. The roles and responsibilities of boards, individual directors, and board chairs, and the need to document those roles and responsibilities;
 - 2. The importance of providing orientation sessions for new board appointees. The *Appointment Policy* document states,

to facilitate the transition, each new member of a board of directors should be provided with some form of orientation. At the very least, this should include a general briefing on the ABC [Agency, Board or Commission] and its operations. Ideally, it would also include the distribution of more detailed material, such as mandate letters, memoranda of understanding, terms of reference, conflict of interest guidelines, and any other information that could be useful in familiarizing recent appointees with their new duties.; and

3. The roles and responsibilities of board committees and the need to document and approve them in terms of reference documents. The *Appointment Policy* document specifically identifies the need for a governance committee that is generally responsible for,

reviewing the terms of reference for individual committees; conducting performance evaluations of the board, its committees, individual directors and the board chair; developing board position profiles and communicating their particular requirements to the government; arranging orientation for recent appointees and encouraging professional development for veteran directors; and providing oversight on issues of ethics and conflicts of interest.

4.54 We did not complete a comprehensive review of governance documentation prepared for the boards of individual commissions. However, we did note some good governance practices during our work.

- **4.55** For example, the Northumberland Solid Waste Commission has prepared a separate fourteen page Board of Directors Policy dated July 2005 that includes such important governance information as:
 - rights as a Commission Member;
 - duties as a Commission Member (including board member conduct);
 - obligation to the Minister of Environment & Local Government:
 - Conflict of Interest Restrictions;
 - travel Policy; and
 - other pertinent information.
- **4.56** The Westmorland-Albert Solid Waste Corporation also provides good information about the roles and responsibilities of its board members. Further, both COGEDES and the Fundy Region Solid Waste Commission have developed and documented terms of reference for their board committees.
- **4.57** However we did note solid waste commissions typically do not maintain the type of documentation envisaged in the provincial *Appointment Policy* document. In addition, a number of the solid waste commissions indicated they do not provide formal orientation sessions for new board members.

Recommendations

- 4.58 We recommend each new Regional Delivery Commission adopt the following good governance practices:
 - document the roles and responsibilities of their board, individual board members, and board executive members;
 - document and approve terms of reference for each of their board committees;
 - provide all new board members with orientation sessions:
 - document a code of conduct for board, management and staff; and
 - create a governance committee of the board to oversee the development and implementation of good governance practices.
- **4.59** Some of the best practices at individual provincial solid waste commissions, as noted in this section, may provide models for developing recommended

documentation.

Accountability and Reporting

- **4.60** Regulation 96-11 under the *Clean Environment Act* is the Regional Solid Waste Commissions Regulation. It provides the following requirements relating to accountability of solid waste commissions to the Province and other stakeholders.
 - 7(1) Within three months after the end of the fiscal year of a regional solid waste commission, the commission shall ensure that an annual audit, financial statements and the related auditor's report are prepared ... and shall transmit copies of the financial statements and auditor's report to the municipalities, rural communities and Indian reserves represented on the commission and to the Minister.
 - 8 Within three months after the end of its fiscal year or by such other date as the Minister may direct, each regional solid waste commission shall submit to the Minister an annual report, in which is set out a description of its activities during the previous fiscal year, in the form and to the extent directed by the Minister and otherwise in conformity with the directions of the Minister.
- **4.61** We noted that all twelve solid waste commissions had received unqualified audit opinions for the most recent financial statements available to us. We also noted that all commissions prepare annual reports. This information is forwarded, as required, to stakeholders listed in the Regulation.
- **4.62** In addition, commissions are required to provide regular reporting to the Department pursuant to their Certificates of Approval to Operate. The Department indicated that this operational reporting is received on a timely basis.
- 4.63 We also reviewed all twelve commission websites to determine if information is presented online that would allow regional residents to assess, and if desired, provide feedback on the performance of solid waste commissions. Unfortunately, we concluded from our review that the accountability information presented on commission websites needs enhancement. We noted:

- Only Fredericton Region Solid Waste Commission provides both its audited financial statements and annual report online. Fundy Region Solid Waste Commission provides audited financial statements only, and all other commissions provide neither;
- 2. Three commissions do not disclose their tipping fees online;
- 3. Three commissions do not disclose the names of commission board members or the municipalities, local service districts, or First Nation communities they represent; and
- 4. Some of the information presented appears to be out of date.
- **4.64** The Internet now serves as a primary source of information for many New Brunswick residents. For that reason, we believe that it is important that all commissions provide complete and up-to-date accountability information on their websites.

Recommendation

- 4.65 We recommend all commissions provide up-todate accountability information on their websites including, as a minimum, the following:
 - audited financial statements;
 - annual reports;
 - current commission tipping fees; and
 - the names of board members indicating which local government they represent.

Compliance With Legislated Mandate

4.66 Section 15.3(4) of the *Clean Environment Act* states:

A regional solid waste commission may
(a) construct, acquire, establish, enlarge,
control, manage, maintain and operate solid
waste collection and disposal facilities,
(b) provide a solid waste management service,
including the collection and disposal of solid
waste, to a person,

(c) make arrangements and enter into agreements with a person with respect to the management of solid waste, including the collection and disposal of solid waste, (d) operate solid waste collection and disposal facilities on behalf of a person,

- (e) acquire, hold and dispose of real or personal property,
- (f) engage and pay personnel,
- (g) subject to the provisions of this or any other Act and to the provision of regulations made under this or any other Act, finance any of its undertakings,
- (g.1) subject to the provisions of this or any other Act and to the provisions of regulations made under this or any other Act, construct, own and operate a generation facility,
- (h) assess, charge and collect fees for services,
- (i) perform any function or duty fixed by or in accordance with the regulations, and
- (j) perform any function or duty, other than those set out in this Act and those fixed by or in accordance with the regulations, that is approved by the Lieutenant-Governor in Council.
- **4.67** Also, the Act states:
 - 15.92(1) A regional solid waste commission may construct, own and operate a generation facility and may use the electricity for its own purposes or sell it to a distribution electric utility or another person, but shall not own or operate a distribution system.
- **4.68** Based upon our review, we believe that all twelve provincial solid waste commissions are acting within their legislated mandates. We identified no areas of concern in this regard.

Financial Management *Tipping Fees*

4.69 Tipping fees charged by solid waste commissions, and particularly the stability of those fees over time, is a key factor that local government stakeholders use to evaluate the performance of their solid waste commission. Exhibit 4.4 shows the basic tipping fees that were charged by the twelve solid waste commissions during 2011.

Exhibit 4.4 - Solid Waste Commission 2011 Tipping Fees

Solid Waste Commission	Tipping Fee (per metric ton) for Residential Household Waste
Landfill Commissions	
Nepisiguit Chaleur	\$42.75
Westmorland-Albert	\$56.00
COGERNO	\$57.00
Fredericton Region	\$74.00
South-West	\$74.00
Fundy Region	\$108.00
Transfer Station Commissions	
Valley (Victoria County)	\$69.20
COGEDES	\$72.74
Kent	\$81.91
Restigouche	\$88.58
Kings	\$90.77
Valley (Carleton County)	\$107.69
Direct Ship Commission	
Northumberland	\$65.75

4.70 Tipping fees vary as a result of different costs to establish a commission's facilities, differences in the extent of diversion and waste treatment programs offered (e.g. only Fundy Region and Westmorland-Albert do on-site composting), level of commission borrowings, and other factors. Operations of each of the regional commissions have evolved independently since they were established in the 1980s and 1990s. Those commissions with relatively lower fees may have more flexibility to add additional programs or enhance existing ones.

Tipping Fees Paid by Transfer Station Commissions **4.71** We noted that tipping fees charged by transfer station commissions are typically higher than those charged by the landfill commissions that process their solid waste. Exhibit 4.5 shows the two major components of tipping fees charged by non-landfill commissions.

Transfer Station Commission	Recipient Landfill Commission	Landfill Tipping Fee	Commission Expenses (Transfer Station, Recycling and Administration)	Total Tipping Fee
COGEDES	Nepisiguit-Chaleur	\$42.75	\$29.99	\$72.74
Kent	Westmorland-Albert	\$64.00	\$17.91	\$81.91
Kings	Westmorland-Albert	\$64.00	\$26.77	\$90.77
Northumberland	Nepisiguit-Chaleur	\$42.75	\$23.00	\$65.75
Restigouche	Nepisiguit-Chaleur	\$42.75	\$45.83	\$88.58
Valley (Carleton County)	South-West	\$61.02 (est.)	\$46.67 (est.)	\$107.69
Valley (Victoria County)	COGERNO	\$57.00	\$12.20	\$69.20

- 4.72 The tipping fee charged to Valley by the South-West Solid Waste Commission is lower than South-West charges within its own region. Westmorland-Albert charges Kent and Kings their commercial mixed waste tipping fee which is \$8 higher than their residential municipal waste rate. Tipping fees charged by other landfill commissions are the same as they charge for residential solid waste within their own regions.
- **4.73** Transfer station commissions provide significant revenue to landfill commissions. In fact, revenue provided by individual transfer station commissions to the landfill commission they deal with usually exceeds that provided by any of the individual municipalities serviced by the landfill commission.
- 4.74 At present, service and related financial arrangements between commissions, including landfill tipping fees, are governed by signed service agreements between involved commissions. We question whether charging full tipping fees in this situation is equitable. Regional tipping fees charged by landfill commissions are intended to recover direct costs of operating their landfill and associated administration costs, along with the costs of regional diversion and education programs, and other regional costs unrelated to landfill operations.
- **4.75** Transfer station commissions operate diversion and

education programs within their own regions. By paying full landfill commission tipping fees, non-landfill commissions are contributing to the diversion and education programs run by landfill commissions and receiving no benefit.

4.76 Section 15.7(5) of the *Clean Environment Act* states:

A regional solid waste commission shall make provision for revenues so as to produce an annually balanced budget.

4.77 Given this legislative requirement that provincial solid waste commissions operate on a non-profit basis, we believe it is inappropriate for landfill commissions to make a profit through transfer agreements with other provincial solid waste commissions.

Selection of Landfills by Transfer Station Commissions 4.78 Pursuant to our review, we learned that Transfer Station Commissions do not always transfer their solid waste to the nearest sanitary landfill. For example, the Valley Solid Waste Commissions' Carleton County transfer station is approximately one hour closer by road to the Fredericton Region Solid Waste Commission landfill than the South-West Solid Waste Commission landfill it currently uses. There may be potential savings (e.g. through lower trucking fees) if Transfer Station Commissions switched to the closest landfill options.

Recommendations

- 4.79 We recommend commissions negotiating solid waste transfer agreements in future consider:
 - what direct and administrative costs are being incurred by landfill commissions in providing service to transfer station commissions; and
 - how these costs may be most fairly allocated in establishing landfill tipping fees under the agreement.
- 4.80 We recommend Transfer Station Commissions investigate the potential for cost savings by shipping their solid waste to alternative provincial landfills, prior to renewing their existing transfer agreements.

Reserves

4.81 The solid waste commission Regulation 96-11

under the Clean Environment Act requires:

- 6.5(1) Each regional solid waste commission shall, by resolution, establish, manage and annually contribute to a special account that is designated by the commission for, and is used for no purpose other than, the payment of post-closure expenses.
- 6.5(2) The amounts required for the post-closure expenses and for the annual contribution to the special account shall be determined in accordance with the recommendations of the Public Sector Accounting Board respecting "solid waste landfill closure and post-closure liability", in the CICA public sector accounting handbook published by The Canadian Institute of Chartered Accountants.
- 6.7 Any money, including interest, within a special account shall be invested or reinvested in accordance with the Trustees Act.
- **4.82** In practice, reserves for post-closure expenses only need to be established by landfill commissions. The Regulation defines post-closure expenses as follows.

"post-closure expenses" means expenses incurred by a regional solid waste commission for all activities performed in relation to the monitoring of a sanitary landfill site and the protection of the environment after solid waste is no longer deposited at the site, including the monitoring of ground water and surface water, the monitoring and treatment of leachate, the monitoring and recovery of landfill gas, the construction and ongoing maintenance of control systems, the construction and maintenance of drainage systems, any acquisition of additional land for buffer zones, site security and final coverage.

4.83 Our review of the audited financial statements of the six landfill commissions indicated five have fully funded post-closure reserves required under CICA standards. The sixth, Nepisiguit-Chaleur, showed a shortfall in funding of \$163,198 as of 31 December 2009. The shortfall does not appear to be a major concern, given that revenues for the commission exceed \$4 million per year.

- **4.84** Under Regulation 96-11, commissions are also permitted (but not required) to establish additional reserve funds including:
 - General Operating Reserve Funds;
 - General Capital Reserve Funds;
 - Generation Facility Operating Reserve Funds; and
 - Generation Facility Capital Reserve Funds.
- 4.85 The balance of General Operating Reserve Funds is limited to 5% of the previous years' budgeted expenditures. There are no funding limits on the other three reserves. Total reserves set aside by individual commissions are shown in Exhibit 4.2, and appear to be reasonable in all cases. We also noted that South West Solid Waste Commission, has documented and approved an investment policy to govern the management of reserve funds set aside for future use. We believe other commissions should consider developing similar investment policies.

Payments to Commission Board Members 4.86 Overall travel and other board costs for the twelve commissions seem reasonable. All commissions have either a travel policy or approved board resolution in place to cover this area. We did note during our review that per diems, allowances, and other payments to board members for attendance at meetings, travel out of region, and meals vary widely from commission to commission. For example, per meeting payments to board members range from \$0 up to \$150, while mileage rates paid for travel range from 39 to 50 cents per kilometer. These variances are as a result of the Province allowing regional commissions to set their rates in the absence of any provincial standards, but would not have a significant impact on tipping fees.

Commission Transportation Subsidies Paid to Remote Municipalities 4.87 Municipalities must bear the costs of trucking solid waste to their regional landfill or transfer station. Therefore, those that are farthest away bear a higher trucking cost simply because of where their regional landfill or transfer station was originally located. This creates a cost inequity that is outside the control of individual municipalities. Two solid waste commissions, Westmorland-Albert and Restigouche, recognized this inequity in their 2011 budgets and provided for transportation subsidies to remote municipalities. In the case of Westmorland-Albert, the

allocation of payments is based upon a "zone" system, with municipalities further from the regional landfill receiving relatively larger allocations of available funding. It is our understanding that the other ten commissions provide no such payments.

- 4.88 In one of the ten regions not providing equalization at present, we were informed that the cost of transporting compostable waste to the regional landfill led an outlying municipality to discontinue trucking such waste to the regional landfill for composting. This significantly reduced the municipal property tax rate. This decision, while deemed necessary by the municipality, was not in keeping with the solid waste treatment approach of the involved commission to do onsite composting.
- **4.89** From a fairness perspective, we believe that the approach adopted by Westmorland-Albert and Restigouche is preferable. Other provincial solid waste commissions should consider whether some form of equalization would more fairly distribute solid waste disposal costs within their regions.

Budget Approval

- **4.90** The *Clean Environment Act* states:
 - 15.7(1)The members of a regional solid waste commission shall not vote on a budget for the commission or to borrow money unless the commission has given written notice of the vote and a copy of the proposed budget or borrowing to each participating municipality, to each participating rural community, to the Minister and to the band council of each participating Indian reserve at least thirty days before the vote.
- **4.91** The 2011 budgets for all twelve commissions were balanced and forwarded to regional municipalities, First Nation band councils, and the Department of Local Government for approval, as required in legislation.

Other Financial Observations

- **4.92** From our review, we are able to make the following additional observations.
 - The Department of Environment and Local Government indicated that they receive and review commission financial statements and budgets

- annually;
- Regional solid waste commissions are covered by the *Public Purchasing Act* (i.e. through their inclusion in the listing of government-funded bodies in Schedule B of that Act);
- All solid waste commissions carry liability insurance; and
- We identified no items of concern pursuant to a line by line comparison of expenditures between comparable commissions.

Other Findings

- 4.93 In completing our work, we became aware of certain issues associated with the environmental impact of solid waste. The sections that follow address some areas where we believe the Department has an important role to play in improving provincial environmental performance. These areas include:
 - Extended Producer Responsibility Programs;
 - Diversion of Solid Waste;
 - Illegal Dumping;
 - Construction and Demolition Debris disposal sites; and
 - Public Education.

Extended Producer Responsibility Programs

- 4.94 Extended Producer Responsibility (EPR) programs result in the diversion of specific types of solid waste before it goes to solid waste commissions by requiring original producers (or first importers) to accept it back and cover costs associated with its recycling, reuse, or disposal. As cost must be passed on to consumers it gives producers the impetus to try to minimize these end-of-life costs so they can keep their prices down. Departmental representatives, the New Brunswick Solid Waste Association, and other stakeholders all agreed that EPR programs have the most potential to reduce the amount of solid waste going to landfills in the future.
- **4.95** In October 2009, the Canadian Council of Ministers of the Environment (CCME) released its *Canada-Wide Action Plan for Extended Producer Responsibility*. The CCME Plan identifies a number of benefits accruing from EPR programs. These include:
 - reduction of taxpayers costs associated with solid waste disposal;
 - environmental benefit of reduced volume of solid

- waste going to landfills;
- incentive for producers to consider redesigning products to reduce associated end-of-life disposal costs (e.g. by removing harmful substances that are costly to deal with at the end of a product's useful life.); and
- fairer allocation of costs by transferring entire lifecycle cost of a product to the producer (and ultimately the end consumer).
- **4.96** Recycle NB is the stewardship board tasked with administering provincial EPR and stewardship programs. It was established in May 2008, pursuant to Section 3 of the new Designated Materials Regulation under the *Clean Environment Act*, as a continuation of the New Brunswick Tire Stewardship Board. At present it administers:
 - The Tire Stewardship Program, under which tires are collected and processed by Tire Recycling Atlantic Canada Corporation (TRACC) which shreds and crumbs the rubber in the tires to manufacture various new rubber products; and
 - The Paint Stewardship Program (PSP) under which paint brand owners are responsible for collecting and managing left over unwanted paint from NB consumers. This is the first and only EPR program implemented in New Brunswick to date.
- 4.97 The 2010-11 Department of Environment annual report included discussion of proposed additional EPR programs covering used oil, glycol, and e-waste. Proposed regulations for some of these were already partially or fully drafted when that report was prepared. However, additions to the Designated Materials Regulation have not been approved by government. Therefore, EPR programs have not been created for these three types of solid waste.
- 4.98 Departmental representatives also indicated that additional EPR programs (e.g. for packaging and printing material) could have a significant impact on the quantity of solid waste generated in the Province. Based upon our review, we believe that additional EPR programs should be designed and implemented in the near future.

Recommendations

4.99 We recommend the Department finalize and request government approval for additions to the Designated Materials Regulation covering used oil, glycol, and e-waste.

4.100 We also recommend the Department design and implement additional extended producer responsibility programs to further reduce the volume of solid waste going to New Brunswick landfills.

Diversion of Solid Waste

- 4.101 In general the least costly approach to dealing with solid waste is to dispose of it in a landfill. However, diverting materials, for example through recycling or re-use, is a better option for the environment. Diversion of solid waste extends the life of landfills, and reduces the amount of leachate and greenhouse gases produced by landfilled solid waste. It can also contribute revenue to a commission.
- **4.102** At the time of our 1994 report, recommended action #6 from the government's response to the Plan for Action prepared by the Premier's Round Table on the Environment and the Economy stated:

In matters of waste reduction, the Round Table supports the target of the Canadian Council of Ministers of the Environment for a 50% reduction in the amount of waste being disposed of by the year 2000.

4.103 Our 1994 report also indicated:

[Department of Environment] DOE is committed to a 50% reduction target for New Brunswick. This will be accomplished through a variety of initiatives focused on the three "R's" of solid waste management – reduce, reuse and recycle. DOE has several initiatives underway including the Beverage Containers Act program, encouraging an industry stewardship model for dairy beverage containers, promoting composting, and encouraging recycling of newspapers and paper products.

4.104 Exhibit 4.6 shows how the actual provincial diversion percentage has changed in the years since the original 50% target was established.

Exhibit 4.6 - New Brunswick Solid Waste Generation (Commission Disposal Volumes)

Year	Solid Waste Disposal Volume (metric ton)	Diversion Percentage from 1988 base
1988	659,582	N/A
1998	402,345	39.0%
1999	399,494	39.4%
2000	388,648	41.1%
2001	386,585	41.4%
2002	371,489	43.7%
2003	393,232	40.4%
2004	415,999	36.9%
2005	416,878	36.8%
2006	415,327	37.0%
2007	413,873	37.3%
2008	450,989	31.6%
2009	422,113	36.0%

Note – these are provincial figures and do not include private sector solid waste disposal so are lower than Statistics Canada figures reported later in this section.

- 4.105 Provincial diversion rates generally improved from 1988 to 2002, primarily due to the shift from 300 unregulated provincial dumpsites to six regional landfills that took place during that period. Regionalization resulted in an improved ability to operate diversion programs. However, since the peak of 43.7% reached during 2002, diversion rates have trended downward as shown in Exhibit 4.6. More provincial focus is needed on this area, along with adding new EPR programs, if the initial progress shown is to continue and the 50% reduction goal is to eventually be achieved.
- **4.106** We would note that New Brunswick's overall performance relating to the diversion of solid waste away from landfills has been relatively strong in comparison with other Canadian jurisdictions, as shown in Exhibit 4.7. While New Brunswick produced the fourth highest per capita amount of solid waste in 2008, it was the Province with the highest per capita diversion rate.

Exhibit 4.7- New	Brunswick Per	rformance vs	Canadian Average

	Canada (metric tons)	Canada (per capita in kilograms)	New Brunswick (metric tons)	New Brunswick (per capita in kilograms)	New Brunswick Rank (per capita)*
To Landfill	25,871,310	777	479,461	642	6th
Diverted	8,473,257	254	267,467	358	1st
Total	34,344,567	1,031	746,928	1,000	4th

Source - 2008 Statistics Canada Report

4.107 Interestingly, as shown in Exhibit 4.8, compared with Canadian averages, a much higher proportion of solid waste that ends up in landfills in New Brunswick comes from residential sources (i.e. 49% for New Brunswick versus only 33% for Canada as a whole).

Exhibit 4.8 - New Brunswick - Canada Comparison of Solid Waste Sources

	Canada (metric tons)	Canada	New Brunswick (metric tons)	New Brunswick
Residential	8,536,891	33%	245,758	49%
Non-Residential	17,334,419	67%	233,703	51%
Total	25,871,310	100%	479,461	100%

4.108 Further, Exhibit 4.9 indicates that a very high proportion of diverted materials are contributed by non-residential sources, and the bulk of diversion in New Brunswick is organic in nature. Since only two landfills in the Province do onsite composting, we assume that most diverted organic materials come from non-residential sources.

Exhibit 4.9 - New Brunswick - Canada Comparison of Diversion by Source and Material Type

	Canada (metric tonnes)	Canada (per capita diversion in kilograms)	Canada (% of total diversion)	New Brunswick (metric tonnes)	New Brunswick (per capital diversion in kilograms)	New Brunswick (% of total diversion)
Diversion Source						
Residential	4,360,505	131	51%	62,076	83	23%
Non-Residential	4,112,752	123	49%	205,391	275	77%
Total	8,473,257	254	100%	267,467	358	100%
Diverted Materials						
Organic	2,439,223	73	29%	225,081	301	84%
Other	6,034,034	181	71%	42,386	57	16%
Total	8,473,257	254	100%	267,467	358	100%

4.109 Our concern is that while the overall per capita diversion of solid waste in New Brunswick compared

^{*}Highest to lowest ranking among eight provinces that reported both landfill and diversion figures in Statistics Canada report, "Waste Management Industry survey: Business and Government Sectors 2008".

favorably with national averages, residential sources are significantly underperforming in terms of diversion. As shown in Exhibit 4.9, provincial per capita diversion from residential sources is only 83 kilograms compared with a 131 kilogram Canadian average. Even more significantly, provincial per capita diversion of nonorganic materials is 57 kilograms compared with a 181 kilogram Canadian average.

- **4.110** Residential diversion rates are primarily a function of two key factors:
 - public knowledge and support of the importance of diverting solid waste away from landfills; and
 - how convenient diversion programs are to regional residents (i.e. residents are more likely to recycle if they have a curb side collection box system than if they must drive 20 kilometres to a recycling depot).
- 4.111 The Department has typically adopted a hands-off approach and allowed regional solid waste commissions to make their own decisions as to the diversion programs they will offer. Commissions do offer various levels of diversion programs to residential customers. A few offer curbside recycling (i.e. collection box programs), especially in urban areas of their regions. Many have set up recycling depots at various central locations throughout their regions. A few offer only minimal services in this area.
- 4.112 Stakeholder feedback we received indicated that there is interest in having diversion programs enhanced. However, diversion programs typically result in additional net cost to solid waste commissions. In fact, the Ontario Office of the Auditor General, in a 2010 report relating to Non-hazardous Waste Disposal and Diversion, noted that, "on average, [Ontario] municipalities reported that the cost of diverting a tonne of blue box recyclable materials was about 40% higher than the cost of disposing a tonne of waste in a landfill."
- **4.113** Additional cost has a direct effect on regional tipping fees, and ultimately municipal property tax rates. Consequently, budgets including such programs are unlikely to be approved by local municipalities, unless there is strong public support for a particular

diversion program within a region.

- 4.114 Provincial financial support for regionally-run diversion programs is limited. Application may be made to the Environmental Trust Fund (ETF) by commissions for diversion programs. However, commissions must compete for ETF funding with other applicants. Funding is provided on a lump sum, single year basis, and the Department indicated that such funding is not intended for ongoing operations. As a typical example, in 2012 Nepisiguit-Chaleur Solid Waste Commission received a one-time grant of \$40,000 from the ETF to carry out a curbside recycling pilot project.
- **4.115** In a few regions commissions have received the public support they need to improve diversion rates. For example, Westmorland-Albert has adopted a wet/dry sorting process that allows the commission to maximize diversion. However, for many commissions it has been a struggle to improve.
- 4.116 There has not been a provincial diversion plan in place since the last one expired in 2005. The goal of that plan was the same 50% reduction in solid waste that was originally adopted by the CCME in 1989. Recent Department attempts to coordinate the development of a provincial plan resulted in resistance from the commissions, and a Departmental decision to request commissions prepare individual five year waste reduction and diversion plans for their regions. The Department provided commissions with a template of suggested inclusions for the plan.
- **4.117** However, several commissions we surveyed indicated that they would like to have more direction and support from the Province in relation to recycling. One commission stated the Province should:

[Translation] *Have more precise objectives in terms of waste reduction in landfills. Implement support programs to reach these objectives.*

4.118 Another suggested that the Province,

[Translation] *Take a firmer position concerning waste reduction and re-routing in this province.*

4.119 The Department of Environment and Local

Government website indicates that one of the primary functions of the Department is to:

Provide integrated stewardship through planning and management of land use, zoning development and waste management issues.

- **4.120** Consequently, we believe the Department does have an important leadership role to play in improving overall provincial diversion rates by:
 - developing and implementing extended producer responsibility programs as previously discussed;
 - helping to establish diversion goals to be worked towards by regional commissions;
 - monitoring, and ensuring the degree of success by individual commissions in achieving those goals is publicly reported;
 - providing financial support for the enhanced diversion programs needed to meet diversion goals (commissions indicated that they would like to have greater access to Environmental Trust Fund monies for this purpose); and
 - educating the public about the importance of supporting diversion programs.
- **4.121** Given the current diversion rates in the Province, especially in the area of residential solid waste, we believe that the Department can no longer defer to the regional commissions in this area.

Recommendations

- 4.122 We recommend the Department ensure challenging diversion goals are set for regional commissions. The Department should also monitor commission performance and ensure the degree of success by individual commissions in achieving their diversion goals is publicly reported. One option may be for commissions to report their diversion performance on their websites.
- 4.123 We also recommend the Department support the delivery of enhanced diversion programs by regional solid waste commissions to help them meet their diversion goals.

Illegal Dumping

4.124 Not all non-diverted solid waste produced by New Brunswick residents, business, and industry ends up in approved landfills. Illegal dumping may vary from pouring out a litre of motor oil in a roadside ditch, to

disposing of several truckloads of solid waste in a secluded wooded area. Whatever form it takes, the Department, solid waste commissions, commission stakeholders, and the New Brunswick Solid Waste Association (NBSWA) all agree that illegal dumping is common in the Province.

- 4.125 For three years up to 2010, the NBSWA operated an ETF-funded provincial illegal dumping hotline. It continues to operate the hotline on a limited basis. An NBSWA representative indicated that they get daily reports of illegal dumping, and had approximately 1,000 files covering separate illegal dumping incidents as of mid-2011.
- **4.126** Illegal dumping is unsightly. But more importantly it may also cause:
 - serious health problems associated with attraction of disease infected rodents;
 - environmental problems (e.g. damage to public water supplies) connected with the improper disposal of hazardous waste (e.g. motor oil); and
 - harm to local eco-systems (i.e. affecting people, animals and plants).
- 4.127 It can also result in significant clean up costs for the owner of the land where the illegal dumping took place (i.e. a municipality, business-owner, resident, or the Province of New Brunswick in the case of Crown lands). It should be noted that clean up of illegal dumpsites is outside the mandate of provincial solid waste commissions.
- **4.128** During our work, some interviewees discussed the problem of illegal dumping in the Province. They believe the key causes of illegal dumping include:
 - lack of convenient access to an approved landfill or C&D [Construction and Demolition Debris] disposal site (due to distance, hours of opening, etc.); and
 - the desire to save money (i.e. by avoiding tipping fees, and associated transportation and labour costs); combined with
 - ignorance or apathy about the environmental and other impacts of illegal dumping; and
 - a perceived lack of enforcement by the Department.

4.129 The Department acknowledged that it has a role in this area, as illegal dumping is a violation of the *Clean Environment Act*. A Departmental representative indicated the Department is working with stakeholder groups to develop consistent standards on how to address reported cases of illegal dumping.

- 4.130 However, based upon our discussions with various stakeholders, we are concerned that the Department's enforcement activities to date have not provided a sufficient deterrent to would-be illegal dumpers. One stakeholder commented they, "would like more cooperation from the Provincial Environment Department in enforcement of illegal dumping and litter laws to ensure waste is diverted to solid waste commission for proper processing." Another said that they believe that illegal dumping is not a high priority for government, and prosecution of offenders does not happen. One commission representative went so far as to say that the Department needs to make an example of someone.
- **4.131** The *Clean Environment Act* does provide for significant fines ranging from \$500 to \$50,000 for individuals, and \$1,000 to \$1,000,000 for businesses. Also, the Department has a compliance and enforcement policy which is applied to achieve compliance through escalating levels of enforcement.
- 4.132 The Department stated their first priority, when responding to a reported illegal dump site, is the protection and restoration of the environment through clean up of the dumpsite. The Department indicated that it follows up on reported illegal dumpsites and has achieved a reasonable level of compliance in having them cleaned up without the need to pursue legal action. The Department also noted that they have issued four recent ministerial orders, involving three illegal dumpsites, to responsible parties and/or to landholders who failed to comply with Departmental clean up requests. Two of these resulted in prosecutions, guilty pleas, and fines being issued.
- **4.133** Often an illegal dumper is not the owner of the land used as an illegal dump site. Departmental representatives indicated that it can be difficult to obtain sufficient evidence to successfully prosecute

illegal dumpers under the Clean Environment Act.

4.134 We were informed the Department of Natural Resources (DNR) has a well-developed enforcement capability to deal with illegal dumping on Crown Land. DNR has taken legal action against individuals for this offence.

Recommendation

4.135 Given the environmental risks and financial costs associated with illegal dumping, we recommend the Department develop a standardized compliance and enforcement approach to better manage illegal dumping in the Province.

Construction and Demolition Debris Disposal Sites

- 4.136 In addition to the six commission-operated regional landfills, the Department has also permitted the establishment of approximately ten private construction and demolition debris (C&D) disposal sites at various locations around the Province. These disposal sites must obtain a Certificate of Approval to Operate from the Department, and are only allowed to accept environmentally inert construction and demolition waste. Such waste can include materials such as wood, drywall, certain metals, cardboard, doors, windows, and wiring.
- **4.137** Permitting such disposal sites appears to contradict the original goal of regionalizing solid waste treatment in the Province. However, the Department indicated that it is done primarily as a convenience to industry, and particularly to reduce the risk that illegal dumping of construction and demolition materials will occur.
- 4.138 These disposal sites are not required to capture leachate or greenhouse gases. Therefore any dumping of unapproved materials (i.e. non-compliance with their Certificate of Approval to Operate) at those sites could have negative environmental consequences (e.g. on nearby groundwater). Departmental representatives indicated that some inspections of these sites are done by the Department's regional offices to ensure compliance with their Certificates of Approval to Operate. We did not review the extent or timing of those inspections as part of our work.

Recommendation

4.139 We recommend the Department ensure all construction and demolition debris disposal sites in

the Province are physically inspected periodically to ensure they are accepting only materials specified in their Departmental certificate of approval to operate and identify and address other environmental concerns. Frequency of inspections of individual sites should be based upon a Departmental evaluation of the risk of noncompliance at individual disposal sites.

Public Education

- **4.140** Both the Department and solid waste commissions have recognized the value of educating the public about the importance of effective solid waste management, and the programs available in New Brunswick.
- **4.141** In general we believe that responsibilities in this area should be assigned, with the agreement of the commissions, as follows:
 - The Department should be primarily responsible for ensuring New Brunswickers are provided with sufficient information about areas of province-wide concern, (e.g. explaining the consequences of illegal dumping); and
 - Individual commissions should be primarily responsible for informing the public about regional solid waste matters (e.g. describing solid waste programs offered by their commission).
- **4.142** To date, the Department has relied heavily on individual commissions to educate the public in all these areas. We did note that in 2010 the Department provided NBSWA with \$30,000 in ETF funds to put on a public education campaign about the environmental damage associated with illegal dumping, and how to report it. However, that initiative is no longer active.
- 4.143 Based upon our review, individual commissions have taken their role in educating the public seriously, and deliver various educational programs. They also provide important information about local programming on their websites. One stakeholder municipality commented, "Public Education/Public Relations is a very important and effective aspect of the success of the [commission's] operation and involves a considerable amount of funding. It has been praised for its effectiveness..."

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4.144 However, as was discussed in connection with diversion programs, the extent of education programs offered by individual commissions will necessarily relate to the willingness of their regional municipalities and local service districts to continue to fund such programs through tipping fees.

Recommendation

4.145 We recommend the Department develop and implement a plan, in agreement with individual commissions, covering ongoing government involvement in educating the public about solid waste matters. That involvement should focus on areas of province-wide concern.

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Appendix I: Solid Waste Commissions

- **4.146** Six commissions operate regional landfills. They are shown below in order from largest to smallest in terms of solid waste received:
 - The Westmorland-Albert Solid Waste Corporation (Berry Mills landfill in Berry Mills), servicing the Greater Moncton and Albert County areas, and accepting solid waste transferred from the Kent Solid Waste Commission, and the Kings Solid Waste Commission;
 - The Nepisiguit-Chaleur Solid Waste Commission (Red Pine landfill in Allardville), servicing Bathurst and area, and accepting solid waste transferred from the Restigouche Solid Waste Commission, COGEDES, and solid waste directly shipped by the Northumberland Solid Waste Commission;
 - The Fundy Region Solid Waste Corporation (Crane Mountain landfill in West Saint John), servicing Saint John and area;
 - The Fredericton Region Solid Waste Commission (Allison Boulevard landfill in Fredericton), servicing Fredericton and area;
 - COGERNO (Montagne de-la-Croix landfill in Riviere-Verte), servicing the North-West of the Province, and accepting solid waste transferred from the Valley Solid Waste Commission (Victoria County only); and
 - The South-West Solid Waste Commission (Hemlock Knoll landfill in Lawrence Station), servicing the Charlotte County area, and accepting solid waste from the Valley Solid Waste Commission (Carleton County only).
- 4.147 Five commissions operate transfer stations. A transfer station is a location where local collection vehicles transfer solid waste to larger vehicles (typically transport trucks) to facilitate transporting the solid waste to an out-of-region landfill. These commissions include (in order from largest to smallest in terms of solid waste collected):

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- COGEDES, servicing the Acadian Peninsula;
- The Valley Solid Waste Commission, servicing Carleton and Victoria Counties;
- The Restigouche Solid Waste Commission, servicing Campbellton and area;
- The Kent Solid Waste Commission, servicing the Kent County area; and
- The Kings Solid Waste Commission, servicing Sussex and area.
- **4.148** The Northumberland Solid Waste Commission, servicing the Miramichi area, does not operate a landfill or transfer station, and directly ships all of its solid waste out of region. It typically collects more solid waste than any of the listed transfer station commissions, but less than any of the landfill commissions.
- 4.149 Provincial solid waste commissions are not permitted in legislation to accept certain types of hazardous waste including liquid waste greater than 20 litres, sludge that is less than 15% solid, liquid oily waste, commercial or industrial hazardous waste, and biomedical waste, without the consent of the Minister of Environment and Local Government. For example, the Westmorland-Albert Solid Waste Corporation recently needed ministerial approval in order to be able to accept sludge from the Greater Shediac Sewerage Commission's lagoon.
- **4.150** The primary pollutant produced by landfills is leachate, a combination of sediments and chemicals that results when water (e.g. rain or water included in certain types of solid waste) leaches down through layers of solid waste. Traditional dump sites did not deal with leachate. Sanitary landfills, however, are required to collect and treat leachate, along with surface run off, before it is released into the environment.
- **4.151** Greenhouse gases (e.g. methane) are another pollutant produced by solid waste landfills. The standard method of disposing of methane is to collect it and burn it off. However, certain landfill commissions, including Fundy, and COGERNO now use methane to produce electricity, which is either used on site or sold to power utilities. Fredericton will begin to do the same during late 2012. Other landfill commissions are

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planning to move in this direction in future.

4.152 Certain solid waste commissions have unique aspects to their operations not shared with other commissions. Two do on-site composting (Fundy Region and Westmorland-Albert), one operates a wetdry collection system with full dry sorting which results in much higher labour costs but achieves a much higher diversion rate (Westmorland-Albert); and one (Fredericton Region) bales garbage prior to placing it in the landfill to reduce the amount of materials blown away from the landfill by the wind. Three of the transfer stations are privately operated (i.e. Kent, Kings, and Valley). And one (Northumberland) has its recycling program fully managed by a private operator.

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Appendix II: New Brunswick Legislation and Government Involvement

- **4.153** There are a number of pieces of provincial legislation that impact upon the governance and operations of New Brunswick solid waste commissions. These include:
 - The *Clean Environment Act*;
 - The Regional Solid Waste Commissions Regulation (96-11) under the *Clean Environment Act*;
 - Designated Materials Regulation (2008-54) under the *Clean Environment Act*
 - The *Municipalities Act* (and the Garbage Collection Regulation);
 - The *Control of Municipalities Act*;
 - The *Municipal Assistance Act*;
 - The Municipal Capital Borrowing Act;
 - The New Brunswick Municipal Finance Corporation Act; and
 - The *Trustees Act*.
- 4.154 The first two pieces of legislation set the governance and accountability framework, and the mandate for solid waste commissions. The Designated Materials Regulation pertains to extended producer responsibility programs that may be established by the Province. The other legislation generally sets parameters around specific aspects of solid waste commission operations, financing, financial management, and financial statement reporting.
- **4.155** The Department of Environment and Local Government (the Department) is responsible for administering and enforcing all of this legislation with the exception of the *Trustees Act*. That Act is administered by the Department of Justice and Attorney General.
- **4.156** Key responsibilities assigned to the Department at present include:
 - appointing four members to each commission board representing local service districts in the region;
 - regulating the operations of solid waste commissions by issuing three to five year Certificates of Approval to Operate to solid waste

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- commissions for each landfill and transfer station they operate, and monitoring their operations to ensure they are complying with the terms of those certificates;
- regulating the operations of private construction and demolition debris disposal sites and composting facilities by issuing Certificates of Approval to Operate, and monitoring to ensure compliance with terms of those certificates;
- providing funding to solid waste commissions for eligible projects through the Environmental Trust Fund:
- designating materials to be subject to provincial extended producer responsibility programs; and
- periodically coordinating and/or promoting provincial initiatives relating to diversion of solid waste away from landfills, and illegal dumping.
- 4.157 Departmental representatives indicated, consistent with the original regional planning approach adopted in the 1980s, the Department has always allowed each commission to have discretion in deciding the type and extent of services to offer residents and businesses within its own region. Commissions must also fund the services they choose to offer from their own revenue sources, primarily the tipping fees they charge users.
- **4.158** However, the Department recently asked each commission to develop a five year waste reduction and diversion plan to be submitted to the Minister of Environment and Local Government.
- **4.159** A template was provided suggesting the plan should include the current status and future plans for:
 - recycling and waste diversion programs;
 - educational and awareness programs;
 - waste diversion formula and current and projected future diversion percentages calculated using that formula;
 - other commission led initiatives or information;
 - government led initiatives; and
 - planned reporting.

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Appendix III: Key Stakeholders

4.160 Aside from the municipalities, local service districts, and First Nation Communities represented on the boards of solid waste commissions, there are two other stakeholder organizations involved with solid waste in the Province. They are Recycle NB and the New Brunswick Solid Waste Association.

Recycle NB

- **4.161** Recycle NB was established in 2008, under the Designated Materials Regulation of the *Clean Environment Act*, as a successor to the New Brunswick Tire Stewardship Board.
- 4.162 The Regulation enables the government to designate materials that then become the responsibility of the manufacturer, brand owner and/or the first importer of the specified designated material. Manufacturers, brand owners and/or first importers must establish and administer a management program for each designated material. The management program may include such functions as storage, collection, transportation, recycling, processing, disposal and other handling of each designated material. Recycle NB (RNB), for its part, is responsible for overseeing the material management plans put forward by the manufacturers, brand owners and/or first importers, and the program in general.

NB Solid Waste Association

- **4.163** In addition to the tire program being overseen by RNB, a paint stewardship Extended Producer Responsibility (EPR) program is now being managed by the paint industry. RNB also oversees this program on behalf of New Brunswickers and reports on the performance of both programs to the Minister of Environment and Local Government.
- **4.164** According to the New Brunswick Solid Waste Association (NBSWA) website, the association, "is a non-profit group dedicated to promoting and furthering the principles of solid waste management in New Brunswick." It was incorporated in 1998 pursuant to significant interest from the twelve member commissions in having such an organization in place.
- **4.165** Its website also states:

Benefits of a provincial association have

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included:

- presenting a unified voice when dealing with government legislation;
- dealing with provincial issues relating to solid waste management;
- public education and awareness on a provincial level as it pertains to all Commissions;
- building a communication network among partners in the solid waste management field.
- **4.166** The NBSWA also provides a forum through which the twelve solid waste commissions may exchange information, and operates an illegal dumping hotline on a limited basis.
- **4.167** The Department indicated the NBSWA will be dissolved when the new regional service commissions are established in the Province in 2013.

Chapter 5 Department of Transportation and Infrastructure Capital Maintenance of Highways

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Department of Transportation and Infrastructure Capital Maintenance of Highways



Introduction

- 5.1 New Brunswick is a largely rural province where the roads and highways connect people to family, work, education, recreation, healthcare, and emergency services. They are vital to our communities and serve as essential transport corridors for industry.
- 5.2 Automobile use in New Brunswick accounts for the largest component of total transportation demand. Nearly 90% of all commuters travel to work by automobile and New Brunswick residents spend approximately 15% of their income on transportation¹. The condition of the highway network impacts all New Brunswick residents.
- 5.3 The Department of Transportation and Infrastructure (Department) utilizes an Asset Management Business Framework to provide a more integrated and strategic approach to the long-term, sustainable investment planning and program management of its transportation infrastructure. In today's economic climate of tight fiscal control, the ability to optimally focus limited funding on highway infrastructure repairs that will best meet provincial needs in the most cost-effective manner is critical to taxpayers.
- 5.4 In this chapter, the term "capital maintenance" refers to repairs made to highway infrastructure to extend the service life of an asset. The Department uses the term "rehabilitation" to refer to these activities.
- **5.5** A glossary of terms used in this chapter can be found in Appendix I.

Why We Completed this Review

- **5.6** We reviewed the results of asset management in the Department for the following reasons:
 - The condition of provincial roads is a significant issue for all New Brunswick citizens.

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¹ New Brunswick Department of Transportation, "New Brunswick at the Centre: A Provincial Multimodal Transportation Strategy 2008-2018", (Province of New Brunswick), p.2.

- Our recent Public-Private Partnership (P3) chapter regarding school construction highlighted significant areas of risk to the Province as a result of deferring required capital maintenance. We are concerned the maintenance patterns we observed in this work may exist in other areas of government given the current fiscal environment. We have observed in our prior work deferred maintenance represents short-term expense relief while increasing long-term cost.
- In 2008, the then Department of Transportation (DOT) implemented a new Asset Management Business Framework to better manage the long-term investment requirements of the Province's aging highway infrastructure. We are interested in the results of this implementation both in terms of the impact on the highway infrastructure to date, and the possible benefits of utilizing asset management principles for other provincial infrastructure.

Objective

5.7 The objective of our review was:

To determine whether capital road repairs, identified as necessary by the Department of Transportation and Infrastructure, are made on a timely basis.

Conclusion

has the appropriate tools in place to identify and prioritize required capital highway maintenance projects, current funding levels do not allow the completion of optimal maintenance treatments on a timely basis. This will result in deferring required maintenance to future periods at greater overall cost to the Province.

Main Points

5.9 The Department is responsible for the maintenance and repair of designated provincial highways.

Maintaining the New Brunswick highway network in an acceptable condition requires a significant taxpayer investment. In their 2008-2018 Multimodal

Transportation Strategy, the Province states that annual expenditures to maintain roadways and bridges exceed \$125 million.² Maintaining these assets is a challenge given the Province's current fiscal situation.

5.10 Due to an increasing proportion of mature or older roads, the Department determined it needed to use a radically different approach to manage the New Brunswick highway network since their traditional approach of "fix the worst first" was considered unsustainable. The Department chose to develop a strategic framework based on the principles of asset management.

The Asset Management Methodology is Sound

- 5.11 The Department utilizes an Asset Management System (AMS) as part of a broader framework to meet the following objectives⁴ (refer to Appendices II and III for more information on asset management):
 - to look at assets over the long term with the goal of minimizing investment costs over the life of an asset (least life cycle cost);
 - to predict how assets will change over time; and
 - to select the treatment strategies that will minimize the cost of maintaining the asset at an acceptable standard.

The AMS is used to produce a 20-year strategic plan of optimal project choices on which 4-year tactical and annual operations plans are based.

5.12 In the first three years after adopting the Asset Management Business Framework with optimal funding in place, the Department noted positive results

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² New Brunswick Department of Transportation, "New Brunswick at the Centre: A Provincial Multimodal Transportation Strategy 2008-2018", (Province of New Brunswick), p.5.

³ Feunekes, U., J. MacNaughton, A. Feunekes, J. Cunningham, S. Palmer, K. Mathiesen. "Taking the Politics out of Paving, Achieving Transportation Asset Management Excellence through OR (Operations Research)", p.5-6.

⁴ New Brunswick Department of Transportation, "Maintenance/Rehabilitation Requirements NBDOT Infrastructure (presentation)", October 27, 2011, Slide 33.

including⁵:

- "Government's funding commitment over the last 3 years has prevented over 1,200 kms of road from deteriorating to a poor condition"[sic]⁶ when compared to the traditional method of project selection; and
- Increased kilometers of capital maintenance on highways completed from 2008-09 through 2010-11 when compared to a similar period under traditional methods. The Department claims over 500 km more of asphalt surfaces and over 700 km more of chip seal surfaces were treated using asset management than were completed using the traditional methodology over a similar period.

Department projections of road condition for 2011-12 to 2014-15 though, based on reduced budgets from government, indicate increasing highway network deterioration.

Reduced Funding Leads to Deferred Maintenance and Deterioration of the Highway Network

- 5.13 The AMS is used to model an optimal capital maintenance plan over a 20 year strategic period. It uses cost data to project four year budget requirements in order to carry out the optimized strategy. When the model was adopted in 2008, one of the Department's objectives was to stabilize the number of kilometers of roads in poor condition.
- **5.14** Based on the information provided from the AMS, four year budget projections beginning in 2011-12 will result in an increase in the number of kilometers of poor roads from 1,730 kilometers in 2012 to 2,224 kilometers by 2015. As a result, the Department will not meet its objective of stabilizing the kilometers of poor roads.
- **5.15** When maintenance is not completed at key stages of the asset's life cycle, the highway network deteriorates and the cost of maintaining the highway

⁵ New Brunswick Department of Transportation, "NBDOT Road Infrastructure Plan 2008-2011, Results and Benefits January 2010", (Province of New Brunswick), p.4-6.

⁶ Ibid., p.7.

network increases. This deteriorating condition leads to ever increasing levels of infrastructure debt. Infrastructure debt is the result of deferring required maintenance to future years.

As Infrastructure Debt Grows, Sustainability of the Highway Network is at Risk

- 5.16 We are concerned that as the infrastructure debt grows, the Province will be in a situation where sustainability of the highway network cannot be maintained due to the higher cost of repairing greatly deteriorated roads with limited annual funds. At that point the Department may have to consider decommissioning an increasing number of assets if it hopes to maintain the remainder of the highway network in accordance with asset management objectives (paragraph 5.11).
- **5.17** We believe it is imperative the Department clearly and accurately communicate the impact of the growing infrastructure debt to government.

Significant Assets are not Included in the Asset Management Optimization Program

- 5.18 A key component of the AMS is the asset data stored in various system databases. This asset data is used to generate information on current condition and predict the future condition of the highway network. We found though that some significant assets such as ferries and large culverts are not modeled using the AMS optimization program.
- **5.19** By excluding these assets, the Department is not fully utilizing the system and may be making non-optimal maintenance decisions by following the traditional, more costly "fix the worst first" approach to capital maintenance project selection for these assets.

40% of the Capital
Maintenance Projects
Chosen for Completion are
not Recommended Through
the Asset Management
Capital Planning Process

5.20 The AMS sets optimal targets for minor rehabilitation, major rehabilitation, and reconstruction to achieve a desired level of service at least lifecycle cost. It also produces a candidate list of potential projects. Departmental staff from different branches and the districts then complete a proposed project plan (Capital Program) that considers a number of other factors that are not included in the computer model. The Department identifies this as the Asset Management Capital Planning process. Departmental staff indicated they believe the proposed Capital Program meets the optimization criteria used within

- the AMS. This program is submitted to the Department's Senior Management for approval.
- 5.21 In 2008, the Department set a target for the final approved Capital Program at 80 % based on the Asset Management Capital Planning process and 20% from other sources. Currently, the Department has achieved an approximate 60/40 ratio, meaning that 40% of the final projects approved by Senior Management for completion are not recommended through the Asset Management Capital Planning process.
- **5.22** We reviewed the 2011-12 and 2012-13 proposed project lists (resulting from the Asset Management Capital Planning process) and found there were a number of projects on the Capital Program that were not on the AMS project lists.
- 5.23 We asked the Department if the final Capital Program would have met the AMS optimization criteria and they indicated they do not verify that the non-AMS selected projects would meet system modeling criteria prior to completion.
- **5.24** Among the factors considered by the Department and included in projects chosen for completion (Capital Program) in the following construction season were:
 - traffic demand;
 - accident levels:
 - Member of the Legislative Assembly (MLA) requests;
 - district priorities; and
 - administrative boundaries.
- 5.25 We believe there should be guidelines established to govern the inclusion of factors not currently modeled in the AMS but used for project selection, such as those noted above, to ensure that there is a clear link between projects chosen using these factors and the Department's overall goals and objectives.
- **5.26** In addition, since the purpose of using the AMS is to identify optimal projects to minimize life cycle

cost, we believe the Department should clearly identify, document, and communicate to government the implications of completing projects that do not meet AMS optimization criteria. Such implications to be communicated should include the increased cost of capital maintenance when not selecting AMS optimal treatments for completion.

New Road Construction can Negatively Impact Sustainability of the Highway Network

- 5.27 New road construction, other than specific projects undertaken as Public-Private Partnerships, does not typically take into account future maintenance costs based on least lifecycle cost analysis when the decision to build the new road is made. This results in a lack of reserved or statutory funding to address future costs. Since current maintenance activities are experiencing a funding shortfall, new road construction can only worsen the situation.
- 5.28 In order to mitigate the impact of new construction on highway network sustainability, we believe the Department should complete full life cycle costing on all new highway infrastructure projects and request long term funding through statutory appropriation to ensure sustainability of these new assets. This would result in equitable funding treatment to that of Public-Private Partnership road kilometers.

Public Reporting of Performance Results and Highway Network Condition can be Improved

- **5.29** With the AMS in place, the Department has the data needed to measure its performance in completing projects and publicly report on the variances against its plans. However, this information is not presented in the annual report.
- **5.30** A key measure of highway network usefulness and sustainability used internally by the Department is road condition. We did not find evidence that the Department reports on the condition of the overall highway network by condition category (i.e. very good, good, fair, and poor).
- **5.31** We believe the Department should provide updated highway network condition information as part of their annual public reporting process. Annual changes in condition categories noting related road kilometers should be clearly communicated in the Department's annual report. This will provide greater transparency regarding the Department's assessment

of the status and sustainability of the highway network.

Recommendations

5.32 Our recommendations are found in Exhibit 5.1

Exhibit 5.1 – Summary of Recommendations

Recommendation	Department's Response	Target Date for Implementation
5.78 We recommend, in order to optimize decisions and reduce long term costs from asset management, the Department prioritize the addition of all significant asset categories not currently modeled in the system with timelines for their inclusion.	The Department will develop a plan to incorporate other assets into the Asset Management System, prioritized based on value and risk.	September 2013
5.83 We recommend the Department report on roads that are in very poor condition and develop optimization targets specific to that category of roads within the Asset Management System.	The Department will assess the value of using very poor roads as a performance measure.	April 2013
5.89 We recommend the Department further enhance the Asset Management System to incorporate non-road condition based factors such as traffic counts, safety indicators, and environmental concerns that significantly impact project selection.	The Department will include these factors as part of its continuous improvement program in a phased approach.	2013-2015
5.114 We recommend the Department establish guidelines to govern projects selected outside the Asset Management System and document the rationale and benefits of these projects against the Asset Management System optimization criteria.	The Department will carry out a process review to establish guidelines as deemed necessary.	September 2013
5.115 We recommend the Department, in its annual report, communicate the implications of selecting and completing projects that do not meet Asset Management System optimization criteria.	The Department will review the Annual Report and communicate compliance with the asset management objectives.	2012-2013 Annual Report

Exhibit 5.1 – Summary of Recommendations (continued)

Recommendation	Department's Response	Target Date for Implementation
5.118 We recommend the Department provide sufficient training for additional staff to be competent in utilizing the Asset Management System. Training should include, but not be limited to, knowledge of optimization process rules.	The Department is pursuing training of additional staff.	April 2013
5.126 We recommend the Department complete the Road Surface policy (a policy that will guide decisions regarding the most appropriate and economical road surface given particular circumstances (i.e. chip seal versus asphalt)). Once complete, we recommend the Department incorporate the road surface selection process into the Asset Management System optimization model.	The Department has completed the Road Surface Policy and will be presenting it to government for approval.	April 2013
5.130 In order to ensure sustainability of the Province's highway network at the most economical cost, we recommend the Department include total lifecycle costs in all new road construction decisions. We also recommend the Department obtain statutory funding when the decision is made to add new roads (similar to Public-Private Partnership highway projects).	The Department is developing a 15-year Strategic Infrastructure Plan that will incorporate a framework for new infrastructure project decisions that includes long-term maintenance and rehabilitation lifecycle costs for future funding considerations.	December 2013
5.179 We recommend the Department develop effective program performance measures for its stated goals and objectives that include specific, relevant targets against which performance can be measured.	The Department has incorporated performance measures as part of our balanced scorecard and is committed to reviewing these measures on an annual basis.	2012-2013 Annual Report

Target Date for Recommendation **Department's Response Implementation** We recommend the Department's The Department will enhance 2012-2013 annual report clearly state the overall the annual report to include a Annual Report highway network condition by kilometer in comprehensive asset each condition category the Department uses, management overview. (currently very good, good, fair, and poor), with the intent of highlighting the short, medium, and long term impacts of not following Asset Management System projected funding recommendations. We further recommend the Department report the level of infrastructure debt caused by deferred capital maintenance in order to present a complete picture of the highway network status and the risk to safety and sustainability.

Exhibit 5.1 – Summary of Recommendations (continued)

Background



- 5.33 The Department is responsible for the maintenance and repair of approximately 19,650 kilometers of designated provincial highways, 84% of which are paved surfaces with either Asphalt Concrete (Asphalt) (37%) or Aggregate Seal Coat (Chip Seal) (47%). Maintaining the New Brunswick (NB) highway network in an acceptable condition requires a significant taxpayer investment. This is a challenge given the Province's limited resources.
- 5.34 The NB highway network is divided into three primary categories: arterials, collectors and locals. The arterial highway system totals over 2,000 kilometers or 12% of all provincial highways but handles 70% of the total vehicle-kilometers driven on the system outside urban areas. Collectors feed traffic from the local highways into the arterial highway network.

Timely Maintenance Maximizes the Lifespan of the Highway Network 5.35 Timely maintenance maximizes the lifespan of highways and is essential if the taxpayers' investment is to be optimized (i.e. maintenance is done at a time when the dollars spent will have the greatest restorative impact on road condition). The Province is facing the challenge of maintaining both new and

- existing infrastructure while addressing the replacement and rehabilitation requirements of its aging infrastructure.
- **5.36** Maintenance activities carried out by the Department can be categorized as ordinary and capital. Both are important components of highway preservation in New Brunswick.
- 5.37 Ordinary maintenance includes regular maintenance activities such as brush cutting and surface patching that is meant to maintain the road at current condition. Investment in ordinary maintenance can lower capital maintenance cost.

Capital Maintenance Extends the Service Life of Highway Assets

5.38 Capital maintenance includes larger scale resurfacing, rehabilitation, and reconstruction activities that are meant to significantly improve road condition and extend the service life of the asset. The Department generally defines this work as rehabilitation.

Example of Impacts of Poor Road Condition

5.39 In doing preliminary research for this review, we noted the following newspaper headline:

"\$1M MRI unit damaged after truck hits pothole" (CBC News, March 2012)

- **5.40** Road surface rutting and vehicle hydroplaning are among the many indicators of road deterioration and the damage to the MRI unit provides one example of the importance of adequately maintaining our roads.
- **5.41** Due to the damage sustained, the MRI unit in this article did not function correctly and resulted in the loss of services to people in the areas of Miramichi, Bathurst and Campbellton.

The Department's Traditional Approach to Repairing Roads was Unsustainable 5.42 Due to an increasing proportion of mature or older pavement, the Department determined in 2002 that it needed to use a radically different approach to manage NB roads since their traditional approach of repairing the worst roads first was unsustainable. The Department chose to develop a strategic framework based on the principles of asset management.

Asset Management

5.43 "Asset management is a comprehensive business strategy employing people, information and

technology to effectively and efficiently allocate available funds amongst valued and competing assets" [Transportation Association of Canada, 1999]

- **5.44** The Department's Asset Management Business Framework was started in 2005 and fully implemented in 2008.
- **5.45** According to the Department's 2010 Asset Management Highway Infrastructure plan the purpose was to:

"provide a more strategic approach to long term, sustainable investment planning and program management. This will enable better decision-making by identifying the appropriate timing for the most effective and economical treatment based on long term, least life cycle costs taking into consideration the transportation infrastructure network to achieve optimal performance within annual budgets." ⁷

- **5.46** In a 2011 presentation to government, the Department indicated that the objectives of asset management are:
 - to look at assets over the long term with the goal of minimizing investment costs over the life of an asset (least life cycle cost);
 - to predict how assets will change over time; and
 - to select best treatment strategies to use to minimize the cost of maintaining the asset at an acceptable standard.
- **5.47** For more information on Asset Management refer to Appendices II and III.

⁷ New Brunswick Department of Transportation and Infrastructure, "Asset Management Highway Infrastructure Plan 2010-2014", (Province of New Brunswick), October 2010, page i.

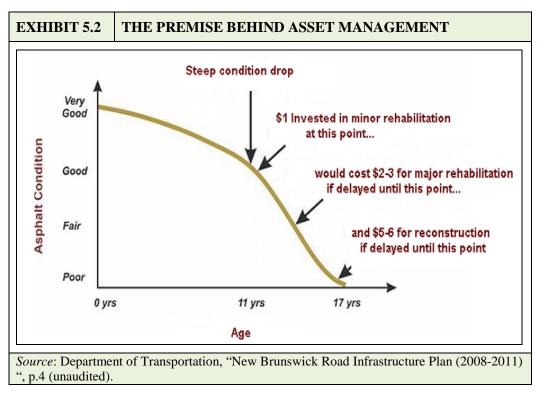


Exhibit 5.2 - The Premise Behind Asset Management

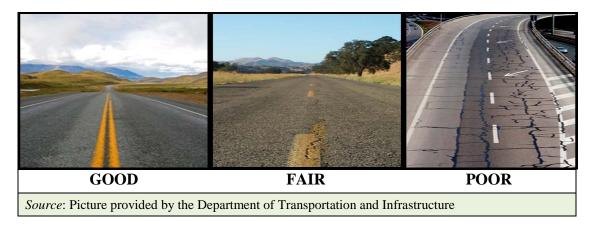
The Increasing Cost of Deferred Capital Maintenance

- **5.48** Exhibit 5.2 shows the relationship between the age of a typical highway and its condition. It also shows the financial impact of deferring maintenance activities past the optimal point of completion.
- **5.49** As an asset ages the condition deteriorates at an accelerated rate, resulting in higher costs. The longer the delay in maintenance treatments, the higher the total cost.
- **5.50** In other words, as an asset ages there are key points in time where an intervention can affect its condition. The timing of the intervention affects the cost of the treatment. The further a treatment is delayed, the higher the cost to repair.

The Cost of Maintenance Can Increase Significantly Over a Short Timeframe 5.51 Treatments refer to maintenance activities completed on roads to address condition issues. The difference in treatment cost can grow significantly within a short time frame. As Exhibit 5.2 illustrates, spending \$1 at the right time to keep a road in good condition can prevent spending \$5-\$6 a few years later to reconstruct it once it has fallen into poor condition.

- 5.52 Treatment costs vary considerably based on the surface type and the maintenance activity required. The Department estimates the cost of treatments to chip seal highways ranging from \$33,000 to \$76,000 per kilometer. ⁸
- 5.53 The treatment cost for asphalt highways is highly dependent upon the type of activity required. The following are costs identified in a Technical Memorandum prepared for the Department by a consultant in 2007⁹:
 - Minor rehabilitation is the 1st level of treatment. Costs range from approximately \$50,000 to \$200,000 per kilometer treated.
 - Major rehabilitation is the 2nd level of treatment. Costs range from approximately \$300,000 to \$400,000 per kilometer treated.
 - Reconstruction is the 3rd level of treatment. Costs range from approximately \$350,000 to \$500,000 per kilometer treated.
- 5.54 For more information on maintenance treatment categories see Appendix VI.

Exhibit 5.3 Examples of Road Categories



⁸ Department of Transportation and Infrastructure, "Asset Management Plan: Pavements", (Province of New Brunswick), April 2012, p.30. ⁹ Ibid

The Condition of the NB Highway Network

Scope & Methodology

- 5.55 The Department uses four general categories to describe overall road condition: very good, good, fair, and poor. Exhibit 5.3 shows examples of these conditions. Each of these categories corresponds to a range of values on three technical condition indices. For more information on condition categories and technical indices see Appendix V.
- 5.56 Our work included a review of legislation, policy, and guidelines governing the capital maintenance programs. We also reviewed project, technical, and other Departmental documentation on capital maintenance, asset management, and performance reporting. We held discussions with Departmental staff and attended a demonstration of the Asset Management System. We performed other procedures as we determined necessary.
- 5.57 We contracted an expert in the field of infrastructure asset management to provide assurance the Asset Management System was credible and based on sound engineering science and modeling methodology.
- 5.58 This chapter focuses on capital maintenance of the New Brunswick highway network. Capital maintenance is work completed with the intent to extend the life of the highway network assets. Work completed with the intent to maintain the current condition of the asset is considered ordinary maintenance and was not included in this review.
- 5.59 Our work encompassed designated highway infrastructure that is part of the Asset Management System inventory and optimal project selection process. It did not include, for example, roads that are part of Public-Private Partnership highway agreements, provincially designated highways within municipalities, or other significant provincial assets such as bridges and buildings.
- 5.60 The Department has undergone a name change.

 Documentation used in this review often references the Department of Transportation. The current name for the Department is Transportation and Infrastructure.

Detailed Observations

- 5.61 To review this topic area, we developed three criteria to use as the basis for our work. We compared the evidence we obtained against the criteria to develop the observations, conclusions and recommendations presented in this chapter. Our criteria were:
 - 1. The Department should identify current and future capital road repair requirements in accordance with its vision of a safe, sustainable transportation network;
 - 2. The Department should make capital road repairs at the optimal time to minimize investment cost while preserving the assets at an acceptable standard; and
 - 3. The Department should measure and report the effectiveness of its work for capital road repairs.

The criteria were reviewed with, and agreed upon by the Department.

Criterion 1: The Department Should Identify Repair Requirements

- **5.62** In its 2010 -11 annual report, the Department stated its vision is a "safe, sustainable transportation network to support the economic and social goals of the Province of New Brunswick."
- 5.63 The responsibility for roads is shared among governments. Outside municipal boundaries, the Province has full authority over matters related to road transportation. New Brunswick's transportation infrastructure is aging and, as a result, maintenance costs are increasing.
- **5.64** The *Highway Act* provides the Minister of Transportation and Infrastructure the authority to construct and maintain the designated highway infrastructure in New Brunswick.

The use of Asset Management Methodology

5.65 The Asset Management Business Framework is a broad framework to guide the Department's decision making processes at various levels. The Asset Management System (AMS) is the technical foundation of this framework. It is comprised of the systems and software used to manage and model the road condition data that identifies optimal maintenance project selections.

The Asset Management System (AMS) is a Good Strategic Tool.

- 5.66 The principles underlying the Department's AMS appear sound. They are based on solid mathematical and engineering principles, using advanced modeling tools to achieve the optimization of investments. The system was designed for the Department by Information Technology experts in the field and contains the necessary components to meet its intended objectives.
- 5.67 The AMS has flexibility in that it is adaptable to new circumstances. Assets can be added to the databases as required, variables used to determine the optimal project candidate list can be changed, and cost data used for projections can be updated. This allows the Department to adjust to a changing operational environment and expand the system by building in parameters such as traffic counts, environmental factors, and safety indicators.
- 5.68 The AMS provides a technology driven framework to optimize highway investments. The Department uses this system to prepare strategic (20 year), tactical (4 year) and operational (annual) plans for capital maintenance to roads.
- 5.69 The AMS optimization model completes an objective comparison of different investment decisions that can have different service lives, performance, and associated costs. By understanding a pavement's life cycle, the Department can perform the right treatment, at the right place, and at the right time.

We are satisfied from the work performed by the consultant that the predictive modeling capability of

the system is reliable given the scope and context of

The Asset Management System is Reliable for Predictive Modeling

this review. For a summary of the consultant's conclusions please refer to Appendix IV.5.71 While we believe the AMS to be a reasonable.

5.70

Concerns Regarding the Department's use of the Asset Management System 5.71 While we believe the AMS to be a reasonably accurate and reliable predictive modeling tool to identify optimal capital maintenance projects at the lowest cost, in the following paragraphs we have highlighted areas of concern that the Department should address to ensure that asset management is utilized at maximum potential. Below is a summarized

list of our concerns:

- significant assets are not included in the system;
- the AMS does not report on "very poor" roads;
- other factors in addition to road condition should be included in the AMS model;
- 40% of the projects selected for completion in the following construction season are not recommended through the Asset Management Capital Planning process;
- limited personnel have knowledge of AMS modeling in the Department;
- choice of road surface type (gravel, chip seal, asphalt) is not part of the AMS optimization model; and
- new road construction can negatively impact sustainability of the highway network.

Significant Assets Are Not Included in the Asset Management Optimization Program

- 5.72 A key component of the AMS is the asset data. The asset data is used to generate information on current condition and, through statistical analysis, predict the future condition of the highway network. However, not all assets are part of the optimization model.
- 5.73 Currently, the AMS models asphalt and chip seal surface designated highways only, and excludes provincially designated highways within municipalities as well as the highways built under Public-Private Partnership agreements.
- **5.74** The Department indicated that Public-Private Partnership constructed highways already have asset management strategies in place as these were required in the original construction contracts. These included future maintenance costs as part of their contracts with private sectors proponents.
- 5.75 The Department is not responsible for maintenance of roads within municipal boundaries with the exception of designated highways within municipalities. These are not currently included in the AMS due to additional infrastructure components such as curb and drainage systems that the AMS is not

programmed to model.

- 5.76 In addition to the provincially designated highways within municipalities, we noted the Department has not yet included other significant assets such as ferries and large culverts into the optimization process.
- 5.77 By not including and modeling assets of significant value in the AMS, the Department is not fully utilizing the system and may be making non-optimal and more costly "fix the worst first" maintenance decisions on these assets.

Recommendation

5.78 We recommend, in order to optimize decisions and reduce long term costs from asset management, the Department prioritize the addition of all significant asset categories not currently modeled in the system with timelines for their inclusion.

The AMS does not Report on "Very Poor" Roads

- 5.79 Level of service represents the Departmental targets for the condition of the overall highway network. In the AMS the level of service is linked to road condition only and this is expressed in terms of general condition levels as very good, good, fair, and poor.
- **5.80** Reporting road condition by general categories is consistent with other jurisdictions. Each of these four categories is defined against accepted technical indices such as the international roughness index. Please refer to Appendix V for more information.
- 5.81 The AMS has, within the "poor" roads classification a sub-category called "very poor" roads. This category of roads is not reported separately and is not well defined. Although an original goal of the AMS was to reduce the "very poor" roads across the highway network, the system was modeled to maintain, as a minimum, the status quo for "poor" roads.
- **5.82** We were informed by the Department that a long-term goal of the asset management plan was to eliminate all roads in very poor condition over a 12-year period but this timeline has shifted since 2008.

This goal is not properly described in the technical or policy documentation reviewed.

Recommendation

5.83 We recommend the Department report on roads that are in very poor condition and develop optimization targets specific to that category of roads within the Asset Management System.

Other Factors in Addition to Road Condition Should be Included in the AMS Model

- 5.84 In the AMS, the level of service target is based on road condition and is set to "non-declining", meaning that the system will model to maintain the status quo. In particular, the target level of service set in the AMS for paved roads in 2008 was to halt any increase in the percentage of roads in poor condition across the highway network.
- **5.85** The Department explained this is the minimum acceptable result set within the AMS optimal program and, although the target is set to maintain the kilometers of roads in poor condition, the intent is to gradually increase the overall condition of the entire highway network in the long term.
- 5.86 It is our understanding that prioritization criteria other than road condition are considered during the final project approval process that determines the Capital Program (capital maintenance plan) for the upcoming construction season. For example, highway safety, traffic volumes, economic development, and environmental concerns are all considered before the final capital maintenance plan is complete.
- **5.87** The Department confirmed that the AMS has the capacity to model on many of these other factors but at this time does not do so. The Department has identified these system enhancements as a continuous improvement project, but has set no target date for its completion.
- **5.88** To further refine the AMS modeling capability, we believe the Department needs to incorporate factors such as those noted above that impact project selection into the optimization program.

Recommendation

5.89 We recommend the Department further enhance the Asset Management System to incorporate non-road condition based factors such

as traffic counts, safety indicators, and environmental concerns that significantly impact project selection.

Process for Development of the Project Candidate List

- **5.90** As noted above, the desired level of service based on road condition is the primary factor considered in the selection of maintenance projects by the AMS.
- 5.91 At the strategic level, the system determines the required maintenance treatment for a section of highway and when it should be applied. It considers highway condition factors such as age and deterioration to identify a specific window of time that any treatment must be applied before it will require a more costly treatment (as highlighted previously in Exhibit 5.2). The AMS uses industry standard rules for defining what interventions are best within these windows of opportunity to optimize investments.

Exhibit 5.4 – Windows of Opportunity for Timely Capital Maintenance



PSDI is the percentile measure of the Surface Distress Index (see Appendix V for more information on Surface Distress Index)

Rehab means rehabilitation

Source: New Brunswick Department of Transportation, "Maintenance/Rehabilitation Requirements NBDOT Infrastructure (presentation)", October 27, 2011, Slide 33 (unaudited).

5.92 Exhibit 5.4 illustrates the concept of opportunity windows. As an asset ages and deteriorates, the maintenance required to return the asset to a specified quality level will increase, as will the cost of the

treatment. As Exhibit 5.4 shows, as an asset ages it slides down the condition curve and into more costly maintenance windows.

- 5.93 The AMS selects projects for maintenance treatments at a specific point within the opportunity window to minimize the total cost. To that end, it creates a candidate list of possible capital maintenance projects that are optimal for cost minimization over a 20-year period.
- 5.94 The Department indicated that the list generated by the AMS does not include all possible candidate projects that meet the optimization criteria. The program stops once its quota of optimal candidate projects is reached but it could produce significantly more. The Department told us that they cannot address the projects currently produced due to resource constraints so producing a longer list has little value.
- **5.95** Since this list of candidates is used for selecting projects, it is possible some projects will be missed.

40% of the Maintenance
Projects Chosen for
Completion are not
Recommended Through the
Asset Management Capital
Planning Process

- 5.96 Once the modeling program has identified the optimal projects, a list of these candidates is generated from the system. This candidate list is used as the foundation for the development of the four year plan and the annual Capital Program (capital maintenance projects to be completed).
- 5.97 Department staff from district offices and the Construction, Planning, and Design branches assess the list of candidate projects while considering other factors that are not part of the AMS modeling program. The result of this annual Asset Management Capital Planning process is a proposed Capital Program for the upcoming construction season.
- **5.98** Among the factors considered in the development and approval of the Capital Program:
 - traffic demand;
 - condition rating;
 - costs;
 - accidents;
 - district priorities;
 - administrative boundaries;

- operational logistics;
- investment targets; and
- Member of the Legislative Assembly (MLA) requests
- Capital Planning process the proposed Capital Program is forwarded to the Design branch for executive review and approval. The result of that review determines the final Capital Program to be carried out on roads and highways in the Province. This final approval process may be further influenced by some or all of the same factors considered in the development of the proposed program.
- 5.100 In 2008, the Department set a target for the final approved Capital Program at 80 % based on the Asset Management Capital Planning process recommendations and 20% from other sources. Currently, the Department has achieved an approximate 60/40 ratio, meaning that 40% of the final projects approved by Senior Management for completion are not recommended through the Asset Management Capital Planning process.
- **5.101** Although most of the factors highlighted above relate to budgetary, technical, or safety concerns and require attention, we believe that during the final approval phase of the Capital Program there is a risk that non-optimal considerations may influence the choice of capital maintenance projects as well.
- **5.102** When considering such factors as district priorities and MLA requests the Department may be influenced by non-condition related variables such as economic and social development, industry considerations, and political activism. While economic, social, and industry considerations could be expected to impact project choice, the Department clearly believed that asset management would "take the politics out of

paving", 10.

- **5.103** A 2010 paper co-authored by key Departmental staff involved in the AMS implementation stated, "Because the consequences of deviating from the optimized path can be easily quantified and communicated to stakeholders, politics has largely been removed from the decision-making process."11
- **5.104** However, we were told it is a long standing practice for Members of the Legislative Assembly to make requests to the Department for capital maintenance and repair projects.
- **5.105** We asked for and received from the Department a document of government priorities that impacted project selection in 2011-12 and will likely influence project selection in 2012-13. The document contained 48 MLA requests for work on asphalt roads and 31 MLA requests for work on chip seal roads.
- **5.106** Although we could not specifically identify which of the MLA requests have been completed, we confirmed with the Department that at least some of these had been included in the 2011-12 Capital Program. Some are also on the 2012-13 proposed project list.
- **5.107** We reviewed the final project plans for both 2011-12 and 2012-13 with Department staff for two programs:
 - Permanent Highways; and
 - Rural Road Initiative.

When these lists were compared with the recommendations from the Asset Management Capital Planning process we identified a number of projects on the approved project plan that were not on the project recommendation lists.

Op. cit., Feunekes, p. 23Ibid., p. 23

- **5.108** For these two programs we found that 18 of 27 (66%) projects approved in 2011-12 were based on recommendations from the Asset Management Capital Planning process, while 9 of 27 (33%) were not.
- **5.109** When we reviewed a list of proposed projects for 2012-13 in the same programs, we found that 24 of 39 (62%) were in agreement with the recommended project list while 15 of the 39 (38%) were not.
- **5.110** In speaking with the Department we learned that the original goal of selecting 80% of all projects from the list of projects recommended through the Asset Management Capital Planning process has now slipped to actual results of approximately 60%.
- **5.111** We asked the Department if the projects selected outside of the AMS optimal project candidate list would have met the AMS optimization criteria and they indicated that they do not verify that the nonsystem selected projects are optimal prior to completion.
- **5.112** We believe there should be guidelines established to govern the inclusion of non-road condition based factors, such as those noted above, to ensure there is a clear link between these projects and the Department's overall goals and objectives.
- **5.113** In addition, since the purpose of using the AMS is to identify optimal projects to minimize life cycle cost, we believe the Department should clearly identify, document, and communicate to government the implications of completing projects that do not meet AMS optimization criteria.

Recommendations

- 5.114 We recommend the Department establish guidelines to govern projects selected outside the Asset Management System and document the rationale and benefits of these projects against the Asset Management System optimization criteria.
- 5.115 We recommend the Department, in its annual report, communicate the implications of selecting and completing projects that do not meet Asset Management System optimization criteria.

Limited Personnel Have Knowledge of AMS Modeling in the Department

- **5.116** The AMS system is complex. The linear programming model is updated on a three year cycle but the system is used regularly in the project planning processes and for budgeting purposes.
- **5.117** A single individual within the Department is most knowledgeable about the AMS. We believe this presents a high risk to the Department since the loss of that person would create a void difficult to fill in the short and possibly medium terms.

Recommendation

5.118 We recommend the Department provide sufficient training for additional staff to be competent in utilizing the Asset Management System. Training should include, but not be limited to, knowledge of optimization process rules.

Choice of Road Surface Type (gravel, chip seal, asphalt) is not Part of the AMS Optimization Model

- **5.119** The level of service selected aims to maintain the physical condition of categories of roads in the highway network at certain levels of quality. We understand there are sometimes pressures to change the type of roadway surface, for example from unpaved (gravel) to surface treated or from surface treated to asphalt pavement.
- **5.120** Consultants contracted by the Department completed a technical report in June of 2011 to support the Department's development of a "road resurfacing policy" that would guide the Department in road surfacing decisions.
- **5.121** The report looked at the processes used in other jurisdictions for deciding what surface is optimal for a roadway in order to develop the screening criteria the Department would use in their policy.
- **5.122** Some significant findings from the consultant's report included ¹²:
 - The greatest potential cost savings of the proposed road surfacing policy are most likely to result from

¹² Department of Transportation and Infrastructure, "New Brunswick Road Surfacing Policy – Background Technical Document", June 30, 2011, p.36.

- the conversion of existing asphalt roads to a treated (i.e. chipseal) surface.
- The proposed policy would reduce NBDoT's [New Brunswick Department of Transportation's] pavement rehabilitation costs by an estimated \$92 million over the next 20 years, or \$4.6 million annually (undiscounted 2011 dollars).
- **5.123** The Department has a draft policy that reflects the process outlined in the consultant's report.
- **5.124** We believe if the Department intends to finalize this policy for decision-making on project work, it should be incorporated into the AMS model.
- 5.125 Changing the road surface from one type to another and calculating the associated costs and benefits is not a function currently included in the AMS optimal modeling program. This would require the inclusion of non-road condition based criteria such as traffic counts, operation and maintenance costs, and economic impacts.

Recommendation

5.126 We recommend the Department complete the Road Surface policy (a policy that will guide decisions regarding the most appropriate and economical road surface given particular circumstances (i.e. chip seal versus asphalt)). Once complete, we recommend the Department incorporate the road surface selection process into the Asset Management System optimization model.

New Road Construction can Negatively Impact Sustainability of the Highway Network

- 5.127 The Asset Management Business Framework is a strategy that focuses on the Department's goal of maintaining a sustainable NB highway network. We believe this goal is negatively impacted by new highway infrastructure development that does not take into account the future costs of capital maintenance through the application of the least lifecycle costing methodology.
- **5.128** New road construction, other than specific projects undertaken as Public-Private Partnerships, does not typically take into account future capital maintenance costs based on least lifecycle cost analysis when funding is appropriated. This results in a lack of reserved or statutory funding to address future costs.

Since current maintenance activities are experiencing a funding shortfall, new road construction can only worsen the situation.

5.129 In order to mitigate the impact of new road development on highway network sustainability, we believe the Department should complete full life cycle costing on new infrastructure projects and request funding at appropriate levels to ensure sustainability of these new assets.

Recommendation

5.130 In order to ensure sustainability of the Province's highway network at the most economical cost, we recommend the Department include total lifecycle costs in all new road construction decisions. We also recommend the Department obtain statutory funding when the decision is made to add new roads (similar to Public-Private Partnership highway projects).

Criterion 2: The Department Should Optimize the Timing of Capital Road Repairs

- **5.131** The goal of asset management is the timely completion of capital maintenance and repairs in order to minimize cost while preserving assets at an acceptable level of service.
- **5.132** Under the pre-AMS "fix the worst first" methodology the highway network condition was rapidly deteriorating.
- 5.133 The AMS is designed to provide a list of capital maintenance projects to be addressed over a 20 year span per the least life cycle cost methodology. Although this appears to be a sound process, unless the Department can complete the capital maintenance as prescribed by the AMS, optimal results cannot be achieved.

Factors Affecting Highway Condition

- **5.134** Completing required capital maintenance is essential to preserve the condition of the highway network, minimize safety risk to users, and protect the public investment.
- **5.135** Age, weather, moisture, traffic volume, and vehicle weight are among the factors that affect the deterioration rate of roadways. These factors, combined with poorly timed maintenance activities, ultimately lead to more expensive maintenance

treatments such as rehabilitation and reconstruction.

- **5.136** New assets have a relatively slow rate of deterioration but without proper preventative maintenance the deterioration rate accelerates. As shown in Exhibit 5.2, as an asset deteriorates the cost of treatments to rehabilitate increase significantly, to the point where the only option is reconstruction.
- 5.137 The Department decided that the best way to address these risks was to invest in asset management. This decision led to an initial three year request for a substantial funding increase in 2008.

The Initial Investment in Asset Management met the Department's Objective

5.138 An initial long-term objective of the Department in 2008, through the use of the AMS optimal model, was to reduce the number of "very poor" roads in the highway network. The AMS 20-year strategic plan created the list of optimal projects that would accomplish this and the projected funding required.

Exhibit 5.5 – DTI Progre	am Funding (Actual	and Budgeted - \$ Millions)

EXHIBIT 5.5	DTI PR	DTI PROGRAM FUNDING (ACTUAL AND BUDGETED - \$ MILLIONS)							
		Actual Expenditures						ıdget	
Program	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	
Permanent Highways	57.2	61.6	56.9	134.2	143.4	142.2	62.0	66.4	
Rural Road Initiative	40.1	40.1	25.7	44.7	49.2	51.9	41.0	38.0	
Totals	97.3	101.7	82.6	178.9	192.6	194.1	103.0	104.4	

Sources:

Actual Expenditures are from Government of New Brunswick Public Accounts.

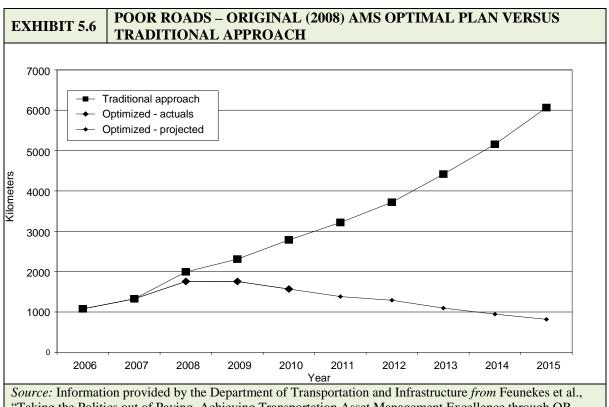
Budget represents forecasted budget supplied by the Department of Transportation and Infrastructure (DTI) (unaudited).

- **5.139** As illustrated in Exhibit 5.5, the actual expenditures for 2008-09 through 2010-11 were significantly higher than those of previous years. This was possible due to increased funding during those years approved by government. The Permanent Highways and Rural Road Initiative programs provide the majority of the funding for capital maintenance of assets treated under asset management.
- **5.140** The Department received this increased three year budget commitment from government based on the

required budget projected by the AMS to meet the Asset Management plan for 2008-09, 2009-10, and 2010-11. The 2008-09 Permanent Highways program funding level represented an approximate 155% increase over the 2007-08 budget for capital maintenance. The Rural Road Initiative funding increased by approximately 120% over that same period.

5.141 By receiving this funding increase, the Department had an opportunity to demonstrate the value of using the AMS for optimal project selection. By comparing the highway network condition after 2010-11with the highway network condition in 2008-09, they were able to highlight the strengths of the AMS.

Exhibit 5.6 - Poor Roads - Original (2008) AMS Optimal Plan Versus Traditional Approach



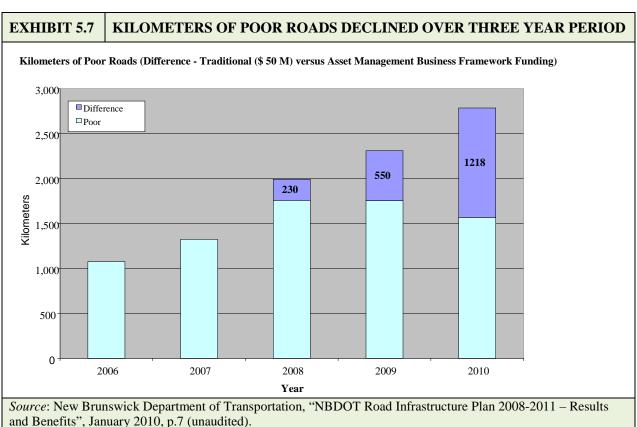
Source: Information provided by the Department of Transportation and Infrastructure *from* Feunekes et al., "Taking the Politics out of Paving, Achieving Transportation Asset Management Excellence through OR (Operations Research)", p. 21 (unaudited).

5.142 The graph in Exhibit 5.6 highlights the success of following the asset management recommendations from 2008 to 2010. The graph compares the number of kilometers of poor roads in each year under the AMS optimal approach and the traditional approach.

The actual results using AMS optimal recommendations with the increased funding are shown on the lower line between 2008 and 2010.

5.143 The lower, downward sloping line (from 2010 to 2015) represented the projected kilometers of poor roads using the original 2008 asset management recommendations with optimal funding levels maintained. These projections have changed since 2008 but the overall trend when compared to the traditional methodology highlights the potential benefit of using asset management at optimal funding levels. The upward sloping line represents the projected kilometers of poor roads under the traditional approach.

Exhibit 5.7 – Kilometers of poor roads declined over three year period



5 144 Exhibit 5.7 shows the kilometers of poor roads

5.144 Exhibit 5.7 shows the kilometers of poor roads that would have been added to the highway network (the numbered sections) in 2008, 2009, and 2010 had the Department followed the "fix the worst first" methodology of previous years and not been provided

with additional funding. The Department indicated that more than 1,200 km of roads were prevented from falling into the poor category by using asset management in contrast to the "fix the worst first" approach.

Exhibit 5.8 – Increase in KM of Asphalt Roads Treated Under AMS

EXHIBIT 5.8	INCREASE IN KM OF ASPHALT ROADS TREATED UNDER AMS						
Age of road (years)	Pre-AMS (2005/06 – 2007/08)	Asset Management (2008/09 – 2010/11)	Net Difference				
9 – 16 (Good to Fair)	154	592	+ 438				
17 – 24 (Fair to Poor)	178	206	+ 28				
25 + (Very Poor)	93	158	+ 65				
Total	425	956	+ 530				
	Source: New Brunswick Department of Transportation, "NBDOT Road Infrastructure Plan 2008-2011 –						
Results and Benefits". Jan	uary 2010, p.6 (unaudited).						

5.145 Exhibit 5.8 shows that the kilometers of asphalt surfaced roads treated from 2008-09 through 2010-11 was 530 kilometers greater than those completed in the three years prior to asset management.

Exhibit 5.9 - Increase in KM of Chip Seal Roads Treated Under AMS

EXHIBIT 5.9	INCREASE IN KM OF CHIP SEAL ROADS TREATED UNDER AMS					
	Pre-AMS	Asset Management				
Treatment	(2005/06 - 2007/08)	(2008/09 - 2010/11)	Net Difference			
Reseal	1490	2020	+ 530			
Double seal	150	380	+ 230			
Total	1640	2400	+ 760			
Source: New Brunswick Department of Transportation, "NBDOT Road Infrastructure Plan 2008-2011 –						

Results and Benefits", January 2010, p.6 (unaudited).

- **5.146** Exhibit 5.9 shows the total kilometers of chip seal roads treated was 760 kilometers greater under asset management than the preceding three years. Chip seal roads that require the more expensive double seal treatment are deteriorated to a greater degree than those that are resealed at less cost.
- **5.147** The Department indicated that employing asset management principles with optimal funding resulted in more kilometers of roads being treated than would have occurred under the traditional approach. The Department modeled these projects in the AMS under the traditional "fix the worst first", non-optimal

methodology to substantiate this conclusion.

Current Funding does not Support the AMS Objectives

- 5.148 The Department presented their capital budget requirements to government for approval based on AMS projections for a four-year period, 2011-12 through 2014-15. The commitment from government was significantly less than what the Department requested.
- **5.149** Significant reductions in current funding threaten to reverse the Department's achievements under the Asset Management Business Framework. As shown in Exhibit 5.10, Departmental projections indicate increasing deterioration of the highway network should funding remain at this level.

Exhibit 5.10 – Forecasted Capital Maintenance Budget Over Four Years (millions)

EXHIBIT 5.10		FORECASTED CAPITAL MAINTENANCE BUDGET OVER FOUR YEARS (MILLIONS)							
	2011-12	2011-12 2012-13 2013-14 2014-15							
Paving Arterials	\$ 10.0	\$ 9.0	\$ 8.1	\$ 9.8					
Paving Collectors	6.0	9.0	8.0	8.0					
Chip Seal	26.0	23.0	25.0	27.0					
Surface Rehab Locals	10.0	10.0	10.0	10.0					
Totals	\$ 52.0	\$ 51.0	\$ 51.1	\$ 54.8					

Source: Table created by Office of the Auditor General of New Brunswick with budget information provided by the Department of Transportation and Infrastructure (unaudited).

- **5.150** Exhibit 5.10 highlights the 2011-12 budget and the Department's budget forecast over the entire four-year period under applicable sections of the Permanent Highways and Rural Road Initiative programs. These funding levels are similar to those that existed prior to asset management, a period during which the condition of provincial roads was progressively deteriorating.
- **5.151** This reduction will make it difficult for the Department to continue implementing asset management recommendations and will result in significantly worsened highway conditions and future long-term increased costs.

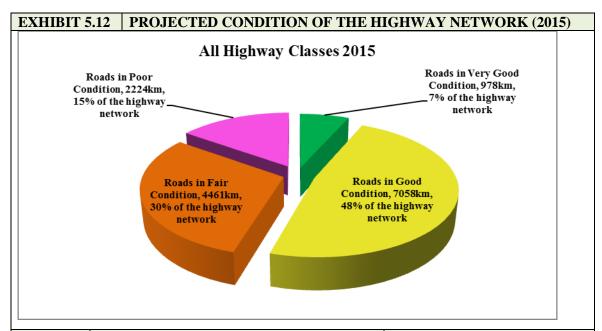
EXHIBIT 5.11 CONDITION OF THE HIGHWAY NETWORK (2011) All Highway Classes 2011 Roads in Poor Roads in Very Good Condition Condition 1516km, 1211km, 10% of the highway 8% of the highway network network Roads in Fair Roads in Good Condition Condition 5392 km, 6602 km, 37% of the highway 45% of the highway network network

Exhibit 5.11 – Condition of the Highway Network (2011)

Source: Graphics, information, and data provided by Transportation & Infrastructure (created September 2012 using the Department's Asset Management System) (unaudited).

- **5.152** Exhibit 5.11 highlights the condition of the highway network as projected by the AMS after the three years of increased funding. The estimated number of kilometers of roads in poor condition as projected by the AMS had decreased to approximately 1,516 km or 10% of the overall highway network.
- **5.153** Exhibit 5.12 below shows the 2015 AMS projected condition of the highway network after the AMS optimal maintenance treatments have been applied under the forecasted funding highlighted in Exhibit 5.10.

Exhibit 5.12 – Projected Condition of the Highway Network (2015)



	Four Yea	r Forecasted	Capital Budg	Net F	our Year Change	
Condition	2011-12	2012-13	2013-14	2014-15	kilometer	%
Very Good	1,005 km	947 km	909 km	978 km	-26	-3%
Good	6,747 km	6,986 km	7,127 km	7,058 km	311	5%
Fair	5,240 km	4,684 km	4,458 km	4,461 km	-779	-15%
Poor	1,730 km	2,103 km	2,228 km	2,224 km	495	29%
Total	14,721 km	14,721 km	14,721 km	14,721 km		

Source: Graphics, information, and data provided by the Department of Transportation & Infrastructure (created September 2012 using the Department's Asset Management System) (unaudited).

Condition Will Deteriorate by 2015

Projected Highway Network 5.154 Exhibit 5.12 predicts over the four year period (2012 through 2015) poor roads in the Province will increase by approximately 495 kilometers or 29%.

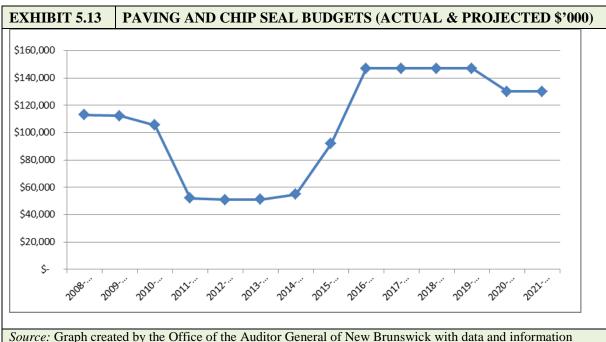


Exhibit 5.13 - Paving and Chip Seal Budgets (Actual & Projected \$'000)

Source: Graph created by the Office of the Auditor General of New Brunswick with data and information provided by the Department of Transportation and Infrastructure (unaudited).

- **5.155** Exhibit 5.13 graphically represents the initial expenditures under the AMS (2008-09 through 2010-11), the budget for 2011-12, and the estimated budgets for 2012-13 through 2014-15. The years following 2014-15 presume that the budget will return to AMS optimal levels.
- **5.156** Exhibit 5.13 shows that to recover from the funding shortfall (2011-12 through 2014-15), an increase of 68% (\$37.2 million) will be needed in 2015-16 with an additional increase of 60% (\$55 million) in 2016-17. The budget would remain at this level until 2020-21 and then stabilize at \$130 million for the remainder of the forecast timeline. At this time, there is no commitment from the Province to provide this level of funding from 2015-16 onwards.
- **5.157** Based on the information provided from the AMS, current budget projections will result in an increase in the number of kilometers of poor roads from 1,730 kilometers in 2012 to 2,224 kilometers by 2015. This amounts to a projected increase in poor road kilometers across the highway network of approximately 47% over 2010-11 levels (Exhibit

5.11). As a result, the Department will not meet its objective of non-declining condition and road safety may suffer.

Reduced Funding Will Result in an Increasing Infrastructure Debt

- **5.158** As the condition of the highway network deteriorates, the cost of maintaining the roads increases. The impact of this decreasing road condition is infrastructure debt. Infrastructure debt is the result of deferring required maintenance to future years.
- **5.159** The Department uses a four year planning period to allow government to pursue a target despite single year setbacks due to unexpected budget shortfalls.

Exhibit 5.14 – Four Year Infrastructure Debt Forecast (millions)

EXHIBIT 5.14 FOUR	FOUR YEAR INFRASTRUCTURE DEBT FORECAST (MILLIONS)							
Annual Funding	2011-12 Actual	2012-13 Budget	2013-14 Budget	2014-15 Budget	Totals			
AMS requirement ¹	\$ 102.0	\$ 102.0	\$ 102.0	\$ 102.0	\$ 408.0			
Forecasted budgets ²	52.0	51.0	51.1	54.8	208.9			
Infrastructure Debt	\$ 50.0	\$ 51.0	\$ 50.9	\$ 47.2	\$ 199.1			

Notes:

- 1. **AMS requirement** is the projected optimal funding required to meet the target level of service ("non-declining" kilometers of poor roads).
- 2. **Forecasted budgets** are the expected budgetary funding from Department information (unaudited) with the exception of 2011-12 where the funding level was known.

Source: Table created by Office of the Auditor General with information and data provided by the Department of Transportation and Infrastructure (unaudited).

- **5.160** The Department estimates that in just four years infrastructure debt for roads currently modeled in the AMS will climb to \$199 million. Exhibit 5.14 illustrates how the projected funding shortfall will result in this accumulated infrastructure debt.
- **5.161** As noted earlier, there are significant assets currently not included in the AMS optimization process. This means that the Department does not model these assets and the projected infrastructure debt is actually greater than currently projected by the AMS.
- **5.162** We are concerned if the infrastructure debt continues to grow, the Province will be in a situation where sustainability of the highway network will be at risk. At

that point the Department may have to consider decommissioning assets if it hopes to maintain the remainder of the highway network at acceptable standards.

5.163 We believe regardless of the method used by the Department, it is imperative the Department clearly and accurately communicate to government the impact of the growing infrastructure debt.

Criterion 3: Reporting Performance

5.164 Effective public reporting of performance is an important component of good governance and accountability. It provides a measure of government accountability to the public, allows government to monitor programs and services effectively, and promotes better decision making.

The Department's Annual Report has Performance Measures

- 5.165 The Department produces an annual report as a primary mechanism of communicating performance achievements publicly. We reviewed the Department's 2010 -11 annual report to determine how the Department reports publicly on the effectiveness of its maintenance programs.
- **5.166** The Department identifies the following four goals as measures of success in one of its core business areas "Safe, sustainable highway network". They are:
 - 1. to improve highway safety;
 - 2. to maintain long-term sustainability of the highway network;
 - 3. to develop strategic highway corridors; and
 - 4. to be environmentally responsible.

We only considered the first two directly applicable for the purposes of our review.

- **5.167** For each goal the Department reported objectives, performance measures, targets (if any), and results.
- **5.168** Some of the performance measures relevant to our review included:
 - to decrease casualty rates per 10,000 motor vehicles. (safety);
 - highway and bridge maintenance and repair activities will be carried out on a prioritized basis

(sustainability);

- various grading, paving and structures projects will be undertake on a prioritized basis (sustainability);
- various chipseal, county projects and local collector paving projects will be undertaken on a prioritized basis (sustainability); and
- progress towards implementation of Asset Management Business Framework (sustainability).

The Department does not Have Targets for all Performance Measures

- **5.169** With reference to the goals in paragraph 5.166 above, there were:
 - Three performance measures for goal #1; and
 - Eight performance measures for goal #2.

Of the eleven performance measures noted in the annual report, only six had associated targets identified.

5.170 Performance measures require preset targets against which actual results can be compared. The absence of targets for performance measures in the Department's annual report means readers cannot determine how successful the Department was in reaching its stated goals.

Reporting on Capital Maintenance Project Results is Limited

- **5.171** When we reviewed the annual report, we noted only summary results of kilometers of completed maintenance were provided.
- **5.172** With the AMS in place, the Department has the data needed to measure its performance in completing the projects and report on the variances against its plans. This information is not provided in its annual report.
- 5.173 The benefits of asset management and the optimization process appear to be readily measured and documented internally. By reporting the results of the optimal program publicly on an annual basis the Department can highlight to government areas of risk such as deteriorating highway condition. Government can then develop plans to mitigate the impact of these risks.

Annual Reporting of the Highway Network Condition is Poor

5.174 In order to communicate the value of following the AMS program, the Department needs to effectively communicate the risks and associated impacts of completing non-optimal capital maintenance projects to

government.

- **5.175** We did not find evidence the Department publicly reports on the condition of the overall highway network by condition category (i.e. very good, good, fair, and poor). However, it is a key measure used for internal purposes.
- **5.176** For example, the "% of kilometers" assessed as poor, a common measure of highway condition used internally in the Department was not reported in the annual report.
- **5.177** In order to clearly communicate the impact of government funding decisions, we believe the Department should provide updated highway network condition information as part of their annual public reporting process.
- **5.178** The Department is currently implementing a balanced scorecard approach to performance reporting internally. It may provide a basis for improved public reporting in the future.

Recommendations

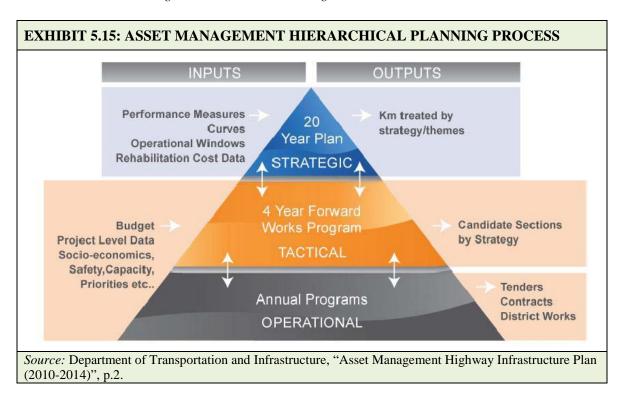
- 5.179 We recommend the Department develop effective program performance measures for its stated goals and objectives that include specific, relevant targets against which performance can be measured.
- 5.180 We recommend the Department's annual report clearly state the overall highway network condition by kilometer in each condition category the Department uses, (currently very good, good, fair, and poor), with the intent of highlighting the short, medium, and long term impacts of not following Asset Management System projected funding recommendations. We further recommend the Department report the level of infrastructure debt caused by deferred capital maintenance in order to present a complete picture of the highway network status and the risk to safety and sustainability.

APPENDIX I: Glossary of Terms

Arterial Highways	Major paved, high volume highway in New Brunswick for long distance intra and inter provincial travel – Route numbers 1 to 99
Asphalt	Refers to Asphalt Concrete, a primary road surfacing material comprised of pre-mixed asphalt binder and aggregate. It is the surface material for arterials and most collectors.
Asset Management	"The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner."
	Department of Transportation Asset Management Plan (2008)
Asset Management	"A Department initiative to provide a more strategic approach to the long term, sustainable
Business	investment planning and program management of its transportation infrastructure."
Framework	Department of Transportation Asset Management Plan (2008)
Asset Management	"A combination of processes, data and software applied to provide the essential outputs for
System	effective asset management."
	Department of Transportation Asset Management Plan (2008)
Capital	Capital Maintenance refers to maintenance and repair activities undertaken to extend the
Maintenance	service life of an asset. (see rehabilitation)
Chip Seal	A road surface comprised of asphalt and fine aggregate applied separately to the roadway bed
	and rolled (compressed) to form the final surface. Chip Seal roads are typically low volume.
Collector (road)	Moderate to low volume roads that connect local and rural New Brunswick roads to major
	surfaced routes (primarily intra provincial travel) – Route number 100 to 199.
Deterioration	"The reduction in an asset's utility and / or useful life resulting from impairment in physical condition that can be caused by factors such as age, wear and tear, defects, climatic conditions, etc."
	Department of Transportation Asset Management Plan (2008)
Infrastructure	Infrastructure debt is the result (expressed in dollars) of ongoing road deterioration caused by
Debt	deferring required maintenance activities to future periods. Deferring maintenance to the future results in increased costs of repair as the road condition requires more work to be
I I . C	returned to a satisfactory condition state.
Least Life Cycle Cost Analysis	"A technique of economic evaluation that sums over a given study period all costs over the useful life of an asset, usually discounted to present value. Components of the life cycle costs include, without limitation: initial costs, rehabilitation costs, maintenance costs, and salvage value."
	Department of Transportation Asset Management Plan (2008)
Level of Service	"Levels of Service describe the quality of services to be provided by the pavement infrastructure for the benefit of road users. They are underpinned by performance indicators that are measured and evaluated according to physical condition, management and demand criteria."
	Cunningham, J, J. MacNaughton, S. Landers, "Managing the Risk of Aging Pavement Infrastructure in New Brunswick Through Innovative Decision Making", p.5
Local (road)	Low volume roads comprised of Local numbered routes (Route numbers 200 and up) and Local unnumbered routes.
Ordinary	Ordinary Maintenance refers to maintenance activities carried out to maintain the current
Maintenance	condition of a road.
Provincial designated highway	"A highway that the Minister of Transportation [and Infrastructure] intends to maintain through the expenditure of ordinary and/or capital fundsper section 15 of the Highway Act."
	Department of Transportation Asset Management Plan (2008)
Rehabilitation	The Department of Transportation and Infrastructure defines rehabilitation as lifecycle altering treatments. (See Appendix VI for specific examples).
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APPENDIX II: Asset Management Model

Exhibit 5.15 – Asset Management Hierarchical Planning Process



- Between 2004 and 2009 the Department directed \$2 million toward consulting, software development, and software purchases to develop an Asset Management System (AMS). This system is a key component of the Asset Management Business Framework.
- As highlighted in Exhibit 5.15 above, the AMS utilizes a hierarchical approach to planning. Government and Departmental goals and objectives are used to create strategic, tactical and operational plans.
- The Exhibit 5.15 symbolizes the flow of inputs on the left to produce the capital maintenance 20-year strategic investment plan (upper triangle), the four-year tactical plan (middle section), and the annual operating plan (bottom section), resulting in the outputs on the right.
- Levels of service (such as the targeted condition for a road), deterioration curves based on age and other factors, and treatment options (possible maintenance activities) are determined for Departmental infrastructure assets that have been entered into the Department's databases. At the strategic level of the model these variables are used to mathematically determine an optimal selection of projects called a candidate list.
- Decision making within the AMS is based upon least lifecycle cost analysis

- (LLCA) methodology, whereby feasible alternatives strategies are compared and the one with the lowest cost over time is selected.
- LLCA compares the total discounted cost of alternative maintenance treatments
 to determine the optimal projects for completion with given resources and
 constraints. In this manner the total cost to maintain the asset is minimized over
 its lifecycle.
- LLCA provides an objective comparison of different treatments as investment decisions that can have different service lives, performance and associated costs. In other words, by understanding an asset's life cycle, optimal rehabilitation can be achieved by doing the right treatment, at the right place and at the right time.
- The required investment (in dollars) is determined by the level of service desired from the asset. For example, the current desired level of service for New Brunswick roads is defined as: kilometers of poor roads are "non-increasing" or in other words "status quo". This means that the Department's target is to maintain the kilometers of poor roads at current levels.
- The tactical planning period is set to achieve the desired level of service by using a 4-year target rather than more volatile annual targets. This provides some flexibility for any single year budgetary or operational situations that result from unforeseen circumstances. It is critical that these targets are reached in terms of dollars invested to ensure that the projects are completed within the overall strategic timeframe.
- Accurate costs of interventions (e.g., repairs, rehabilitation or reconstruction) are needed to generate budgets or evaluate impacts. The Department uses the following steps to establish costs:
 - 1. identify treatments which are acceptable to the design branch and characterized by their cost and intensity;
 - 2. group treatments into families;
 - 3. examine past expenditures on similar contracts;
 - 4. comparison to the current asphalt prices;
 - 5. apply appropriate discount and inflation factors;
 - 6. update the model;
 - 7. apply specific adjustments at the project level.
- The cost data within the AMS is updated as conditions change. The data is used to create the four-year tactical plan and the associated capital maintenance funding requirements.

Source:

- 1. Department of Transportation and Infrastructure, "Asset Management Highway Infrastructure Plan (2010-2014)"
- 2. Interviews with Department staff

APPENDIX III: Key Aspects of Asset Management

In general, asset management asks the following questions (2012 – Executive Brief, Advancing a Transportation Asset Management Approach, US Federal Highway Administration)

1. What is the state of my assets?

- a. What do I own?
- b. Where is it?
- c. What condition is it in?
- d. What is its remaining useful life?
- e. What is its remaining economic value?

2. What is my required level of service?

- a. What is the demand for services by stakeholders?
- b. Are there regulatory requirements I must meet?
- c. What is my actual performance?

3. Which assets are critical to sustained performance?

- a. How can it fail? How does it fail?
- b. What is the likelihood of failure?
- c. What does it cost to repair?
- d. What are the consequences of failure?
- e. How can I mitigate these failures?

4. What are my best "Operations and Maintenance" and "Capital Improvement" investment strategies?

- a. What alternative management options exist?
- b. Which are the most feasible for my organization?

5. What is my best long-term funding strategy?

- a. What revenues will I have?
- b. What is my investment gap or surplus to meet asset condition goals?
- c. What is my revenue gap to keep my asset within my risk tolerance level?
- d. What would be my optimum mix of:
 - i. Preservation and Preventive Maintenance
 - ii. Reactive Maintenance
 - iii. Rehabilitation
 - iv. Replacement
- e. If I cannot afford my optimum mix, what is the best mix of fixes I can afford?

Answering these questions require data. The context (legal framework, government objectives, public health and safety, sustainability, etc.) plays a critical role in the decision making process.

APPENDIX IV: Summarized Conclusions from Consultant's Report

The following are excerpts from the consultant's report and summarizes his response to our Office regarding the reliability of the Department's Asset Management System.

Assessment of the Asset Management System

1) Completeness and accuracy of the current condition of the road kilometres in the New Brunswick Asset Management System

The AMS and associated processes in place provide a completely and reasonably accurate state of the current condition of the road network (paved and surface treated) that **are included in the system** (see notes below) and that are under the jurisdiction of the DTI.

Notes:

The AMS does not include Public-Private Partnership (P3) roads. These roads will be incorporated into the DTI AMS at the time they are transferred to the Province.

There is a different process used for choosing priorities and funding provincially owned roads in municipalities. The Department has the desire to include those roads into the AMS and to develop five-year priority plans for them.

2) Accuracy of short and long term projections of capital funding requirements to maintain the current condition given the Department's goals over a twenty year planning horizon.

The AMS and associated processes in place provide **reasonably accurate** projections of funding requirements to maintain the Department's paved and surface treated roads in the condition **defined by the levels of service established**.

Notes:

The levels of service adopted by the Department in 2008 refer to the physical condition of the roads. Other non-condition based levels of service are used outside the AMS process at the project selection stage.

Improvements to the road network in the AMS projections are defined in terms of a reduction of the number of kilometres in the "poor" category. The initial 2008

projections of funding needs and resulting three-year budget did achieve the goal of improving the road network, i.e., reducing the percentage of roads in poor condition.

3) Economy of the application of capital budget dollars by the AMS to achieve the least cost life cycle approach (LCLCA).

The Department has set a goal of achieving 80% of the projects selected will meet the AMS LCLCA and levels of service criteria. This target has not been reached.

It can be concluded that the capital budget **dollars invested in projects that are recommended by or meet the criteria set by the AMS** are applied in the most economical way to achieve the least cost life-cycle approach and meet the established levels of service.

It was not possible to assess, based on the information at hand, if the other projects selected contribute to achieving the least cost life-cycle objectives or the levels of service targets.

4) Accuracy and reliability of the AMS to project the deterioration of overall physical condition of road kilometres for valuing the related infrastructure deficit

An in-depth analysis of the formulation and rules in the AM system was beyond the scope of this evaluation. However, the documentation reviewed and a detailed presentation by DTI Asset Management staff points to a reliable and reasonably accurate forecast of current and future road network conditions.

Valuing the "infrastructure deficit" requires the following parameters: the current (or future) condition of the road; the actual/expected service life of the road; and the level of service.

Based on the **AMS road condition assessment, asset service lives and adopted levels of service,** the "infrastructure deficit" that is calculated is reliable and reasonably accurate. A key recommendation stemming from this assessment, however, is to revise the levels of service to include other non-condition parameters which in fact may change the value of the "deficit" (up or down).

5) Evaluation of the AMS

a) As a decision-making tool;

Overall, based on the historical records of road conditions and cost avoidances, the AMS has enabled better decision-making. As it evolves, matures and is refined, the AMS will prove to be an even more valuable decision-making support tool.

b) To predict the most cost effective and economical timing and treatment of infrastructure;

The AMS, based on the level of service criteria currently in place predicts the most cost effective and economical timing and treatment of the road infrastructure considered.

c) To accurately assess future dollar impact of deferring capital repairs.

The AMS, based on the current level of service criteria, is reasonably accurate in assessing future dollar impacts of deferring capital repairs.

Since the AMS generates medium to long term scenarios, the prediction of the impacts of deferring capital repairs is highly dependent on the estimate of future budget allocations. Overly optimistic budget allocations beyond the current 3-year budget plans do not present an accurate portrait of the impacts of these budget reductions.

APPENDIX V: Condition Category Description

This table, taken from the Department's 2012 Asset Management Plan, provides a general description of the different condition categories used by the Department. It also references technical condition measures (IRI, SDI, and VIR) commonly used by the Department to show where the different condition categories would fall within the technical scales.

Condition	Description	Asphal	Asphalt Surfaces				
		Class	IRI	SDI	Class	VIR	
Very Good	Asset is very close to new condition with very little deterioration	Arterial Collector Local	0 - 1.5 0 - 1.5 0 - 1.5	10 - 8.5	Local Roads	10 - 9	
Good	Asset has some minor deterioration but is still functioning at a very high level of performance – some preservation activities can be considered	Arterial Collector Local	1.5 - 1.8 1.5 - 2.7 1.5 - 2.7	8.5 - 7	Local Roads	< 9 - 6	
Fair	Asset has deteriorated to the point where rehabilitation or replacement would be considered – functional performance is still acceptable	Arterial Collector Local	1.9 - 2.7 2.7 - 3.5 2.7 - 3.5	7 - 5	Local Roads	< 6 - 3	
Poor	Asset has deteriorated to the point where either a major rehabilitation is required or complete replacement – functional performance is below acceptable levels	Arterial Collector Local	> 2.8 > 3.5 > 3.5	5-0	Local Roads	< 3	

<u>IRI (International Roughness Index)</u> is a standard scale for Asphalt surface roughness of a single wheel track measured in meters / kilometer of suspension travel. The lower values represent the smoothest surfaces.

SDI (Surface Distress Index) is a mathematical model that incorporates severity and density ratings for seven surface distress types into a single score from 10 to 0 with 10 being least distressed.

<u>VIR (Visual Inspection Rating)</u> measures the coarseness of chip seal surface condition on a scale of 10-0, with a score of 10 representing the highest rating.

APPENDIX VI: Capital Maintenance Treatment Life spans

This table, taken from the Department's 2012 Asset Management Plan, provides information on the types of treatments in different treatment categories by road surface type and the associated average service life of those treatments.

Surface Type	Strategic Rehabilitation Category	Example Treatments	Average Service Life (yrs)
	Preservation	Micro-surfacing	5 – 8
	Minor Rehabilitation	Mill-Seal Spot Pad- Seal	8 – 12
Asphalt	Major Rehabilitation	Mill-Base-Seal Spot Pad-Base-Seal Full Pad-Base-Seal	12 - 15
	Reconstruction	Pulverize-Base-Seal Expanded Asphalt-Seal Expanded Asphalt- Base-Seal	15 – 20
Chinseal	Minor Rehabilitation	Single Seal–Minimal Leveling	8 – 10
Chipseal	Major Rehabilitation	Pulverize-Double Seal	8 – 12

Chapter 6 Follow-up on Recommendations from Prior Years' Value for Money Chapters

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Follow-up on Recommendations from Prior Years' Value for Money Chapters

Background

- giving the Legislative Assembly, and the general public, information about how responsive government has been to our value for money recommendations. We think it is important that both MLAs and taxpayers be provided with sufficient information to assess the progress government is making in implementing these recommendations.
- 6.2 Note that recommendations made to departments and Crown agencies pursuant to our financial audit work are followed up annually as part of our financial audit process, and are not discussed in this chapter. For a complete list of our audits over the last ten years, please see Appendix A.
- departments and agencies accept and implement our value for money recommendations. Consequently, in this chapter we report on the progress updates as provided to us by departments and Crown agencies for value for money recommendations made in our 2008, 2009, and 2010 chapters. Even though we did not have the resources to review the accuracy of all responses, we reviewed all responses received related to our 2008 recommendations for accuracy and gathered the information for 2009 and 2010. (See Appendix B for detailed status report of recommendations since 2008).

Summary

6.4 Our overall results show departments and agencies report they had implemented about 65% (90 of 139) of our value for money recommendations from the 2008, 2009 and 2010 Reports of the Auditor General. We anticipate this percentage will increase for 2009 and 2010 recommendations as we continue to track them.

- 6.5 We are somewhat encouraged that the percentage of value for money recommendations implemented from 2008 was 57%, given it is the highest such four-year percentage since 2002. It also appears, based on self-reporting by the Departments responsible for responding to recommendations in our 2009 and 2010 reports, that four-year percentages may be even higher in the next two years.
- 6.6 However, not apparent in these numbers is the fact that certain projects have very high overall implementation rates (e.g. Post Secondary Education Training and Labour Adult Literacy 2008 93%) while others are very low (e.g. Environment and Local Government Environmental Impact Assessments 2008 0%). Also, an implementation rate of 57% for 2008 means that many of our value for money recommendations had not been fully implemented, even after four years.
- 6.7 Our Office is committed to continuing to work with departments and agencies to develop sound, practical recommendations in all our reports. Further, we will continue to use our follow-up process as a means of providing encouragement and support for departments to fully implement our value for money recommendations.
- 6.8 We are pleased to report that a number of the members of the Public Accounts Committee and the Crown Corporations Committee have questioned departments and agencies appearing before them on how successful they have been in implementing our value for money recommendations. We see this as an important part of government accountability. The appendices to this chapter contain detailed listings of past reports and recommendations. This is intended to facilitate the work of the two committees.
- 6.9 Further, in the fall of 2012 we were informed that the Department of Finance Minister's Office, was in the process of developing a formal government response document covering all of our recent value for money recommendations. Our understanding is that this document will be prepared on an annual basis. This additional attention to our recommendations may further encourage departments and agencies to adopt our value for money recommendations on a timely

basis.

Scope and Objectives

- 6.10 Our practice is to track the status of our value for money recommendations for four years after they first appear in the Report of the Auditor General, starting in the second year after the original Report. In other words, in this Report for the year ended 31 March 2012, we are tracking progress on value for money recommendations from 2008, 2009 and 2010. Our objective is to determine the degree of progress departments and agencies have made in implementing our recommendations. We have assessed their progress as fully implemented, not implemented, disagreed with, or no longer applicable.
- 6.11 To prepare this chapter, we request written updates on progress from the respective departments and Crown agencies. They are asked to provide their assessment of the status of each value for money recommendation. In addition, departments and agencies also add any explanatory comments they believe necessary to explain the rationale for their assessment.
- **6.12** We received all the updates requested.
- **6.13** In the past year we followed up on all value for money recommendations made in our 2008 Report. Areas covered included:
 - New Brunswick Investment Management Corporation;
 - Superintendent of Credit Unions;
 - Environmental Impact Assessment;
 - Timber Royalties;
 - Adult Literacy Services; and
 - Departmental Annual Reports.

Detailed Findings

- departments and Crown agencies have done in implementing value for money recommendations we made in the years 2008, 2009 and 2010. Exhibit 6.1 gives an overview of the status of recommendations by department and agency. Exhibit 6.2 shows the results summarized by year.
- **6.15** Exhibit 6.2 shows departments and agencies reported to us that they had implemented 64 of 93

(about 69%) of our value for money recommendations from 2009 and 2010 Reports of the Auditor General. For 2008, based upon departmental and agency reporting, and our own review of their assessments, we have concluded that 26 of 46 (i.e. 57%) of our recommendations have been implemented. Of the remaining 20 recommendations, 13 have been agreed with but not yet implemented, and seven have been disagreed with. Two additional recommendations made in 2008 are no longer applicable. Consistent with our established process, this is the last year that our 2008 value for money recommendations will be subject to our formal follow up process.

Exhibit 6.1 - Status of Value for Money Recommendations as Reported by Departments/Agencies

			Value for Money Recommendations					
Department / Agency	Audit area	Year	Total	Disagreed	Implemented	Agreed/Not implemented	No longer applicable	% Implemented
	Financial Assistance to Industry	2010	7	2	2	3	0	29
	New Brunswick Innovation Foundation	2009	9	0	3	6	0	33
, ,	New Brunswick Art Bank	2010	7	0	4	3	0	57
Early Childhood	Provincial Testing of Students Anglophone Sector	2009	16	0	14	2	0	88
Environment and	Environmental Trust Fund	2009	8	0	8	0	0	100
Local Government	Environmental Impact Assessments	2008	8	3	0	5	0	0
Executive Council	Review of Departmental Annual Reports	2008	1	0	0	1	0	0
Investment	Investment Performance and Cost Analysis	2008	9	1	5	3	0	55
Justice and the	La Caisse populaire de Shippagan	2009	6	0	5	1	0	83
Attorney General	Superintendent of Credit Unions	2008	10	0	7	3	0	70
Natural Resources	Timber Royalties	2008	4	3	1	0	0	25
New Brunswick Liquor Corporation	Agency Stores	2010	10	0	10	0	0	100
Post Secondary Education,	Immigration with the Provincial Nominee Program	2010	20	0	12	8	0	60
Training and Labour	Adult Literacy Services	2008	16	0	13	1	2	93
Social	Review of Nursing Home Contract with Shannex Inc	2009	10	0	6	4	0	60
	Totals		141	9	90	40	2	65

Recommendations Year No longer Agreed/Not Total Implemented Disagreed **Implemented** applicable implemented 2010 44 0 28 14 2 64 2009 49 0 36 13 0 73 7 2008 48 2 26 13 57 2 9 141 40 Total 90 65

Exhibit 6.2 - Summary Status of Recommendations by Year as Reported by Departments/Agency

Comments on recommendations from 2008

- **6.16** Exhibit 6.3 provides a full listing of our 2008 value for money recommendations that are still not implemented.
- **6.17** Our 2008 value for money recommendations have reached the end of the four year follow-up cycle. They are in the areas of:
 - New Brunswick Investment Management Corporation (NBIMC);
 - Superintendent of Credit Unions;
 - Environmental Impact Assessments;
 - Timber Royalties;
 - Adult Literacy Services; and
 - Departmental Annual Reports.
- **6.18** Immediately following Exhibit 6.3, we provide some additional commentary on some of the value for money recommendations from these six 2008 projects.
- Assembly to look at the 2008 value for money recommendations which the government has not implemented. Upcoming meetings of the Public Accounts Committee and the Crown Corporations Committee provide an opportunity for Members to pursue the status of these recommendations with the involved Departments and Crown agencies.

Exhibit 6.3 - Summary Status of 2008 Value for Money Recommendations Not Implemented

Department/ Agency	Chapter Name	Year	Volume	Chapter	Par.	Recommendation	Status
NBIMC	Investment Performance and Cost Analysis	2008	2	2	48	We recommended NBIMC disclose the actual performance of the individual unit trust funds in the Corporation's annual report.	Disagreed
Finance		2008	2	2	108	We recommended the Minister of Finance re- examine the Province's approach to the investment management of its large funds and identify opportunities where NBIMC could provide advice, investment management and trustee services.	Not Implemented
		2008	2	2	120	We recommended the Minister of Finance document a formal pension plan funding policy for the Public Service Superannuation Plan, Teachers' Pension Plan and the Provincial Court Judges' Pension Plan.	Not Implemented
NBIMC & Finance		2008	2	2	219	We recommended the Minister of Finance and NBIMC agree on a formula to establish the total amount of incentive pay that NBIMC may distribute each year.	Not Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	63	We recommended the Superintendent of Credit Unions inspect the stabilization boards annually.	Not Implemented
Superintendent of Credit Unions & Justice and Attorney General		2008	2	3	101	We recommended the Department of Justice [and Attorney General] comply with the requirements of the annual report policy with respect to the content concerning the work of the Superintendent of Credit Unions in its annual report.	Not Implemented
		2008	2	3	105	We recommended the Department examine the conflicting roles of the Superintendent and make changes where appropriate.	Not Implemented

Exhibit 6.3 - Summary Status of 2008 Value for Money Recommendations Not Implemented (continued)

Department/ Agency	Chapter Name	Year	Volume	Chapter	Par.	Recommendation	Status
Department of Environment and Local Government	Environmental Impact Assessments	2008	2	4	67	We recommended Appendix C of the Registration guide be amended to require public meetings to be held during the determination review phase for every registered project unless the proponent is able to provide evidence to the branch that such a meeting would not add value to the public consultation process.	Disagreed
		2008	2	4	69	We further recommended a representative of the branch should attend each public meeting held during the determination review phase of a proposed project.	Not Implemented
		2008	2	4	102	We recommended the DENV [Department of Environment] website provide, on a project by project basis, a rationale for certificates of determination and EIA [Environmental Impact Assessments] approvals issued and explanations as to how major concerns raised by the proponent and/or stakeholders during the review process have been addressed.	Disagreed
		2008	2	4	142	We recommended DENV should develop, implement, and maintain a formal monitoring process that allows it to adequately monitor proponent compliance with conditions of Certificates of Determination and EIA approvals and commitments made in registration and other documents. Such a process should include the requirement for the Project Assessment and Approvals branch to verify proponent assertions about their compliance with those conditions.	Not Implemented
		2008	2	4	144	We also recommended DENV should present sufficient information on its website to keep the public up to date about the compliance status of projects for which Certificates of Determination or EIA approvals have been issued.	Disagreed
		2008	2	4	161	We recommended the Project Assessment and Approvals Branch develop and implement an effectiveness reporting system for the EIA program.	Not Implemented
		2008	2	4	177	We recommended DENV complete its review of the EIA Regulation and make necessary modifications to the Regulation to bring it up to date.	Not Implemented

Exhibit 6.3 - Summary Status of 2008 Value for Money Recommendations Not Implemented (continued)

Department/ Agency	Chapter Name	Year	Volume	Chapter	Par.	Recommendation	Status
Department of Environment and Local Government	Environmental Impact Assessments	2008	2	4	178	Further, we recommended Schedule A to the Regulation be reviewed to ensure that all types of projects that could potentially have a significant negative impact on the environment are listed for registration, thereby making the list comprehensive and establishing branch responsibility for the coordination of all EIAs.	Not Implemented
Department of Natural Resources	Timber Royalties	2008	2	5	84	We recommended the Department implement a new system to determine fair market value.	Disagreed
		2008	2	5	88	We recommended the new system establish royalty rates on a regional basis.	Disagreed
		2008	2	5	92	We recommended the Department implement a new timber royalty system that allows the royalties charged to reflect changes in market indices on a frequent basis, which would be at least quarterly.	Disagreed
Post-Secondary Education, Training and Labour	Adult Literacy Services	2008	2	6	221	To obtain the most value from its monitoring, the Department should ensure that monitoring information is used in the program's planning.	Not Implemented
Executive Council	Review of Departmental Annual Reports	2008	2	7	32	Therefore, we recommended the Executive Council develop legislation for an enhanced performance reporting regime in New Brunswick. The legislation should reflect the principles of the Canadian Institute of Chartered Accountants' Statement of Recommended Practice on Public Performance Reporting.	Not Implemented

Department of Finance / New Brunswick Investment Management Corporation (NBIMC)

Five of nine recommendations have been fully implemented

- **6.20** In 2008, we looked at some indicators of NBIMC's investment performance, and provided an analysis of the costs of the organization. This was a follow-up study to Chapter 3 of Volume 2 of our 2006 Report, in which we reported on our assessment of the governance structures and processes in place at NBIMC.
- **6.21** Of our nine original recommendations, five have been fully implemented, three have not been fully implemented and NBIMC disagreed with one.
- **6.22** Steps taken to implement our recommendations included:
 - A Minister of Finance letter of expectations, with NBIMC performance targets, is now drafted annually;
 - The Department of Finance has had an independent consultant conduct a review of NBIMC's investment performance and processes; and
 - NBIMC enhanced the performance information provided in their annual reports.
- 6.23 However, NBIMC disagreed with our recommendation that they disclose the actual performance of the individual unit trust funds in the Corporation's annual report. In discussing the changes they had made to their annual report, and our recommendation, NBIMC commented:

We believe that our stakeholders find this level of reporting useful and easier to understand rather than the additional complexity that would arise from presenting at the more detailed individual unit trust funds level.

- 6.24 We continue to believe that the recommendation is valid. As we stated in our 2008 report, "The financial statements disclose the specific mandate, benchmark and return objective for each unit trust fund. ... What is missing from the annual report is the actual performance of the 17 unit trust funds."
- **6.25** We also recommended the Minister of Finance

reexamine the Province's approach to the investment management of its large funds and identify opportunities where NBIMC could provide advice, investment management and trustee services. The independent consultant referred to in this section made a similar recommendation to the Department of Finance. However, at the time of our follow up work the Department of Finance was waiting for the task force on public sector pensions to report before making a decision whether to implement this recommendation.

- 6.26 A further recommendation was that the Minister of Finance document a formal pension plan funding policy for the Public Service Superannuation Plan, Teachers' Pension Plan and the Provincial Court Judges' Pension Plan. Again, the Department is waiting for a report from the task force before addressing this recommendation.
- 6.27 Finally, we recommended the Minister of Finance and NBIMC agree on a formula to establish the total amount of incentive pay that NBIMC may distribute each year. No such jointly agreed upon formula has been established as yet. However, we were informed that compensation policies were looked at by the independent consultant referred to previously in this section, and this area will be addressed by the NBIMC board of directors in conjunction with the consultant's recommendations.

Department of Environment and Local Government Environmental Impact Assessments

6.28 In this assignment, we wanted to determine whether the Department was carrying out its key roles and responsibilities under the NB Environmental Impact Assessments (EIA) Regulation (87-83) – Clean Environment Act and related departmental guidelines with due regards for economy, efficiency and effectiveness. We also wanted to identify key risks associated with the provincial EIA process and determine the extent to which those risks were being managed.

None of our eight recommendations have been implemented

- **6.29** In our 2008 Report, we concluded the Department was carrying out most of its key roles and responsibilities with due regard for economy, efficiency and effectiveness. We also concluded that most risks associated with environmental impact assessments were being adequately managed by the Department.
- **6.30** However, we did identify areas that needed improvement including:
 - ongoing departmental monitoring of approval conditions and other commitments made by proponents during the EIA process;
 - Departmental processes for getting public input as part the EIA process; and
 - the transparency of decisions taken as a result of the EIA process.
- 6.31 Therefore, we made eight recommendations to the Department that we believed would improve these areas. Unfortunately, from our 2012 review work we have concluded that none of the recommendations have been implemented. Based on Departmental comments it appears that they disagree with three of the recommendations, and agree with, but have not yet implemented the other five.
- **6.32** The Department disagreed with our recommendations that:
 - the Registration guide be amended to require public meetings to be held during the determination review phase for every registered project unless the

- proponent is able to provide evidence to the branch that such a meeting would not add value to the public consultation process;
- the Departmental website provide, on a project by project basis, a rationale for certificates of determination and EIA approvals issued and explanations as to how major concerns raised by the proponent and/or stakeholders during the review process had been addressed; and
- the Departmental website present sufficient information to keep the public up to date about the compliance status of projects for which Certificates of Determination or EIA approvals have been issued.
- **6.33** The Department has indicated that it considers its current public consultation processes sufficient. It has also commented:

The Department considers the current compliance and enforcement process is satisfactory. The Department considers the information available to the public relating to EIA projects on the website to be satisfactory at this time. The conditions that are currently posted on the website essentially do summarize the rationale for certificates of determination and EIA approvals. ... Additional information beyond that which is provided on the website can currently be obtained under provisions of the Right to Information Act. Furthermore, if the Department were required to fulfill this recommendation, additional resources would be needed.

- **6.34** However, we continue to believe that implementation of these three recommendations is necessary to address public input and transparency concerns identified during our 2008 review.
- **6.35** We made five other recommendations:
 - a representative of the branch should attend each public meeting held during the determination review phase of a proposed project;
 - the Department should develop, implement, and maintain a formal monitoring process that allows it to adequately monitor proponent compliance with conditions of Certificates of Determination and EIA approvals and commitments made in registration and other documents. Such a process should include the requirement for the Project

- Assessment and Approvals Branch to verify proponent assertions about their compliance with those conditions;
- the Project Assessment and Approvals Branch develop and implement an effectiveness reporting system for the EIA program;
- the Department complete its review of the EIA Regulation and make necessary modifications to the Regulation to bring it up to date; and
- Schedule A to the Regulation be reviewed to ensure that all types of projects that could potentially have a significant negative impact on the environment are listed for registration, thereby making the list comprehensive and establishing branch responsibility for the coordination of all EIAs.
- **6.36** The Department continues to indicate its agreement with these recommendations, but reported no substantive progress in implementing them as of our 2012 review.

Department of Natural Resources Timber Royalties

Only one of four recommendations have been fully implemented

- **6.37** The three objectives of this review were to:
 - obtain a better knowledge of timber royalties and the processes and requirements surrounding them;
 - determine if the Department was complying with its legislated requirements; and
 - determine if there were any financial or value-formoney issues the Department should address.
- 6.38 We concluded that while the Department was meeting its legal requirement to annually review and establish royalty rates, and used market information in this process, some royalties did not reflect fair market value. We also concluded that the Department should record the gross value of its royalty revenue and record an expenditure for the amount it pays to licensees for their management of Crown lands.
- **6.39** We made four recommendations, of which the Department has only implemented one relating to the grossing up of royalty revenue.
- **6.40** The Department disagreed with the other three recommendations:
 - the Department implement a new system to determine fair market value;
 - the new system establish royalty rates on a regional basis; and
 - the Department implement a new timber royalty system that allows the royalties charged to reflect changes in market indices on a frequent basis, which would be at least quarterly.
- develop a new system to establish fair market value, although it has made adjustments to the way fair market value is calculated under the current system. It also indicated that it does not agree with adopting regional royalty rates, as it believes the current system results in the calculation of accurate rates. Further the Department, for a number of reasons, does not agree with adjusting royalties on a quarterly basis. However, it has amended the *Crown Lands and Forest Act* to allow more frequent adjustments if needed.

6.42 Based upon the findings reported in our 2008 Report, we continue to believe our recommendations are valid, and that the Department should reconsider their decisions not to implement them.

Department of Post Secondary Education, Training, and Labour Adult Literacy Services

We are very pleased to note that thirteen of our recommendations have been fully implemented

- **6.43** The four objectives of this project were to determine whether the Department:
 - had appropriate strategic direction for its adult literacy support;
 - had appropriate control procedures for its adult literacy support;
 - had appropriate procedures to measure the results of its adult literacy support; and
 - had appropriate performance reporting on its adult literacy support.
- 6.44 We concluded in 2008 that while the Department did have appropriate strategic direction for its adult literacy support, there were significant deficiencies in its control procedures, results measurement procedures, and performance reporting for the program. We made sixteen recommendations to address those deficiencies.
- **6.45** We are very pleased to note that as of our 2012 review, thirteen of the recommendations have been fully implemented, and another two were no longer applicable due to changes in the way the program is administered.
- 6.46 The only outstanding recommendation that has not yet been fully implemented was, "the Department should ensure that monitoring information is used in the program's planning." The Department has developed a quality framework for the program that includes a monitoring component. However, as that framework has only been implemented on a pilot basis to date, formal monitoring activities would not yet be providing sufficient data for use by the Department in program planning.

Department of Justice and Attorney General Superintendent of Credit Unions

We are pleased to note that seven of our ten recommendations have been fully implemented

- 6.47 Our objective for this assignment was to determine if the Superintendent of Credit Unions is fulfilling his duties and responsibilities to oversee the financial stability and solvency of credit unions and caisses populaires for the protection of New Brunswick depositors.
- **6.48** We found weaknesses in a number of areas that are the responsibility of the Superintendent of Credit Unions including:
 - monitoring the financial condition of all credit unions and caisses populaires;
 - monitoring of the financial condition of stabilization boards;
 - monitoring whether credit unions, caisses populaires and stabilization boards comply with the Credit Unions Act: and
 - reporting publicly on performance.
- **6.49** We made ten recommendations, and are pleased to note that seven of them had been fully implemented by the time of our 2012 review. The status of the three that have not yet been fully implemented is discussed in the paragraphs that follow.
- 6.50 We recommended the Superintendent of Credit Unions inspect the stabilization boards annually. There are two such boards including the Risk Management Agency (RMA) and l'Office de stabilisation de la Fédération des caisses populaires acadiennes (l'Office). Based on our late 2011 review, we concluded that the RMA is now inspected annually. However, that is not the case for l'Office, which was last inspected in 2009.
- inspections, especially given the serious problems that occurred at La Caisse populaire de Shippagan (refer to our 2009 Report Volume 1). We believe the failure to inspect stabilization boards on an annual basis creates the risk that a similar situation could arise. We again strongly recommend that the stabilization boards be inspected annually by the

Superintendent of Credit Unions.

- Attorney General] comply with the requirements of the annual report policy with respect to disclosure related to the work of the Superintendent of Credit Unions in its annual report. Based on our review, the Department does report its performance in terms of activities. However it does not compare that performance with any pre-established objectives or plan, as envisaged by the provincial annual report policy.
- 6.53 We recommended the Department examine the conflicting roles of the Superintendent and make changes where appropriate. In our 2008 Report we stated, "The framework of the credit union system places many hats on the Superintendent's head. Not only is he the Superintendent of Credit Unions, but he is also a board member of the RMA board, l'Office board and the NBCUDIC [New Brunswick Credit Union Deposit Insurance Corporation] board. In addition, he is also Director of the Credit Unions branch. Having one individual with so many roles could lead to conflicts."
- 6.54 There have been some legislative changes made to the role of the Superintendent that have partially addressed this recommendation. For example, the Superintendent was the chair of NBCUDIC; but is now only a member. Further, the Superintendent is still on the RMA and l'Office boards, but only as a non-voting member. However, we believe other conflicts identified in 2008 remain and should be addressed.

Executive Council Office Review of Departmental Annual Reports

- annual reports. The primary objective of our work was to determine the degree to which departmental annual reports and our government's reporting on performance could be improved by applying the principles of the Canadian Institute of Chartered Accountants (CICA) 2006 Statement of Recommended Practice Public Performance Reporting. We also wanted to determine what enhancements might be recommended for the Province's Annual Report Policy (AD-1605), an important policy that has remained essentially unchanged for over 20 years.
- 6.56 We made one recommendation to Executive Council Office, that it develop legislation for an enhanced performance reporting regime in New Brunswick. The legislation should reflect the principles of the Canadian Institute of Chartered Accountants' Statement of Recommended Practice Public Performance Reporting.
- 6.57 To date, that recommendation has not been implemented. We believe that rigorous performance reporting through the annual reporting process is a key component of an effective accountability relationship between government, the Legislative Assembly, and provincial taxpayers. Consequently, we continue to encourage government to implement this recommendation in the near future.

General Comments on the Implementation of our Recommendations 6.58 As noted earlier, we encourage the Public Accounts and Crown Corporations Committees to use this chapter to hold government accountable for implementing our value for money recommendations. Exhibit 6.4 reports government's progress, in implementing our value for money recommendations since 1999.

Exhibit 6.4 - Implementation of Value for Money Recommendations

Year	Number of	Recommen	dations Impleme	nted Within
Tear	Recommendations	Two years	Three years	Four years
1999	99	35%	42%	42%
2000	90	26%	41%	49%
2001	187	53%	64%	72%
2002	147	39%	58%	63%
2003	124	31%	36%	42%
2004	110	31%	38%	49%
2005	89	27%	38%	49%
2006	65	22%	38%	N/A*
2007	47	19%	N/A*	45%**
2008	48	N/A*	60%**	57%****
2009	49	73%**	73%***	-
2010	44	64%***	-	-

^{*} No follow-up performed in 2010

- 6.59 We are encouraged that the percentage of value for money recommendations implemented from 2008 was 57%, the highest such four-year percentage since 2002. It also appears, based on self-reporting by the departments and agencies responsible for responding to recommendations in our 2009 and 2010 reports, that four-year percentages may be even higher in the next two years.
- **6.60** However, not apparent in the 2008 percentage is that certain projects have very high overall implementation rates (e.g. Post-Secondary Education,

^{**} As self-reported by departments and agencies with confirmation by our Office in the Department of Justice and Consumer Affairs

^{***} As self-reported by departments and agencies

^{****} As self-reported by departments and agencies and reviewed for accuracy by our Office.

Training and Labour – Adult Literacy – 93%) while others are very low (e.g. Environment and Local Government – Environmental Impact Assessment – 0%).

6.61 We are committed to continuing to work with departments and Crown agencies to develop sound, practical recommendations in all our value for money reports. Also, we will continue to use our follow-up process as a means of providing encouragement and support for departments and Crown agencies to fully implement as many of our value for money recommendations as possible in future.

Appendix A

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Appendix A Summary of Significant Projects Conducted in Departments and Crown Agencies over the Past Ten Years

The following is a list of value-for-money projects reported in a separate chapter of our annual Reports over the last ten years, organized by department and agency. The year of reporting is in brackets following the subject of the projects. The list is organized using the current name of the department or agency, even though in some cases the project was conducted prior to government reorganization.

Department of Agriculture, Aquaculture and Fisheries

Salmon Aquaculture (2004)

This chapter assesses whether Province of New Brunswick programs ensure that New Brunswick salmon cage culture operations are economically, environmentally, and socially sustainable.

Department of Economic Development

Financial Assistance to Industry (2010)

This chapter assesses whether the Department has adequate procedures in place to measure and report on the effectiveness of the financial assistance it provides to industry.

New Brunswick Innovation Foundation (2009)

This chapter examines whether governance structures and practices established by the Department in connection with the delivery of innovation funding through the New Brunswick Innovation Foundation ensure accountability and protection of the public interest.

Department of Education and Early Childhood Development

Provincial Testing of Students – Anglophone Sector (2009)

This chapter assesses the Department's strategic direction for its provincial testing of students in the Anglophone sector. It also assesses the Department's process of administering its provincial testing of students in the Anglophone sector.

Facilities Maintenance (2005)

This chapter examines whether the Department has adequate systems and practices in place to ensure that school facilities are appropriately maintained.

Department of Environment and Local Government

Solid Waste Commissions (2012)

This chapter examines the governance, accountability and financial management of the twelve provincial solid waste commissions. It also addresses the Province's involvement in reducing the impacts of solid waste on the environment.

Wastewater Commissions (2011)

This chapter examines the governance, accountability and financial practices of the three largest wastewater commissions: the Greater Moncton Sewerage Commission, the Greater Shediac Sewerage Commission and the Fredericton Area Pollution Control Commission. The report addresses concerns with respect to board governance, accountability and questionable financial practices of the Greater Moncton Sewerage Commission.

Environmental Trust Fund (2009)

This chapter examines whether the purpose of the Environmental Trust Fund is clearly established, and whether the Fund is measuring and reporting the achievement of its goals and objectives. It also examines whether the Fund is operating as intended with respect to grants.

Environmental Impact Assessment (2008)

This chapter examines whether the Department is carrying out its key roles and responsibilities under the NB Environmental Impact Assessment (EIA) Regulation and related Departmental guidelines with due regard for economy, efficiency and effectiveness. It also identifies key risks associated with the provincial EIA process and determines the extent to which those risks are being managed.

Beverage Containers Program (2004)

This chapter examines whether the Department has established satisfactory procedures to measure and report on whether the Beverage Containers Program is achieving its intended results. It also reports on the progress the Department has made in implementing the recommendations and responding to the findings of our 1994 report on the Beverage Containers Program.

Executive Council Office

Constituency Office Costs for Members of the Legislative Assembly and Executive Council (2011)

This chapter reports observations, findings and recommendations regarding Members' constituency office costs with respect to the authority and management by both the Office of the Clerk of the Legislative Assembly and departments. It identifies positive features, as well as issues that need improvement to ensure proper stewardship and accountability.

Department of Finance

Tax Expenditures (2003)

This chapter examines and assesses the processes of approving, monitoring, evaluating and reporting provincial tax expenditure programs.

Department of Health

Medicare - Payments to Doctors (2012)

This chapter examines whether the Department of Health is maximizing its recovery of incorrect Medicare payments to doctors, through the practitioner audit function. It also highlights unusual items that warrant further investigation by the Department.

EHealth – Procurement and Conflict of Interest (2012)

This chapter examines the government procurement policy for purchases of services related to the E-Health initiative. It also examines whether a conflict of interest exists in the use of consultants.

Program Evaluation (2007)

This chapter examines whether adequate systems and practices have been established to regularly evaluate programs funded by the Department of Health.

Health Levy (2006)

This chapter explains what the health levy is for, and summarizes the issues we identified related to the health levy process.

Prescription Drug Program (2005)

This chapter examines whether the Department has adequate procedures in place to manage the performance of the Prescription Drug Program, and whether there is adequate reporting on the Prescription Drug Program's performance. It also examines whether the Department has adequate procedures in place to ensure that the drug assessment process for formulary listing and the amount paid for drugs and pharmacy services are managed with due regard for cost effectiveness.

Accountability of Psychiatric Hospitals and Psychiatric Units (2003)

This chapter assesses whether the Department has appropriate accountability processes in place for the operations of the psychiatric hospitals and psychiatric units under the direction of the Regional Health Authorities.

Department of Human Resources

Absenteeism Management (2003)

This chapter examines whether government has systems and practices in place to effectively manage employee absenteeism in the Civil Service.

Legislative Assembly

Constituency Office Costs for Members of the Legislative Assembly and Executive Council (2011)

This chapter reports observations, findings and recommendations regarding Members' constituency office costs with respect to the authority and management by both the Office of the Clerk of the Legislative Assembly and departments. It identifies positive features, as well as issues that need improvement to ensure proper stewardship and accountability.

Department of Justice and Attorney General

Superintendent of Credit Unions (2008)

This chapter examines whether the Superintendent of Credit Unions is fulfilling his duties and responsibilities to oversee the financial stability and solvency of credit unions and caisses populaires for the protection of New Brunswick depositors.

New Brunswick Credit Union Deposit Insurance Corporation (2007)

This chapter examines whether the New Brunswick Credit Union Deposit Insurance Corporation has adequate structures, processes and procedures in place to fulfill its obligation to protect the deposits of members of credit unions and caisses populaires in New Brunswick.

Pension Benefits Act (2006)

This chapter examines the protections offered by the *Pension Benefits Act* to active and former pension plan members, and the nature of the operations of the Office of the Superintendent of Pensions.

Health Levy (2006)

This chapter explains what the health levy is for, and summarizes the issues we identified related to the health levy process.

Department of Natural Resources

Timber Royalties (2008)

This chapter describes timber royalties and the processes and requirements surrounding them. It also examines whether the Department is complying with its legislated requirements.

Wildlife Trust Fund (2007)

This chapter reports the results of an audit of a sample of grants issued by the fund and our testing of the conservation revenue fee.

Tracking System for Wood Harvested from Private Woodlots (2006)

This chapter examines whether the Department maintains appropriate processes to ensure the tracking system for primary forest products harvested from private woodlots is operating as required by the *Transportation of Primary Forest Products Act*. It also examines whether the Department uses the information provided by the wood tracking system in assessing and reporting publicly on the sustainability of the private wood supply in New Brunswick.

Department of Post-Secondary Education, Training and Labour

Immigration with the Provincial Nominee Program (2010)

This chapter examines whether the Population Growth Secretariat has identified and documented significant planning measures for New Brunswick's Provincial Nominee Program. It also examines whether the Secretariat has adequate processes and controls for delivering the Provincial Nominee Program in New Brunswick, and if it supports the program in achieving its objective "to increase the economic benefits of immigration to New Brunswick." Finally, it examines whether the Secretariat measures performance for the Provincial Nominee Program and if it publicly reports the program's performance.

Adult Literacy Services (2008)

This chapter examines the Department's strategic direction, control procedures, and performance measurement and reporting for its adult literacy support.

Private Occupational Training Act (2007)

This chapter examines whether the Department, and the New Brunswick Private Occupational Training Corporation, are fulfilling their mandate to provide effective consumer protection to students of private occupational training organizations in New Brunswick.

Department of Social Development

CMHC Social Housing Agreement (2011)

This chapter examines the future of the financial impact to the Province due to the decline of funding under the CMHC Social Housing Agreement; and assesses whether the Department managed and administered the programs in accordance with four key agreement requirements.

Review of Nursing Home Contract with Shannex Inc. (2009)

This chapter examines various questions surrounding the contract with Shannex Inc. to supply nursing home beds.

Special Care Homes and Community Residences (2005)

This chapter examines whether the Department has appropriate practices to ensure compliance with the Province's legislation and standards for special care homes and community residences.

Nursing Home Services (2004)

This chapter examines whether the Department has appropriate practices to ensure that licensed nursing homes are complying with the Province's legislation for nursing homes, and that the Province's legislation and departmental policies for nursing homes are reviewed and amended on a regular basis.

Child Day Care Facilities (2003)

This chapter examines whether the Department has appropriate policies and practices to ensure compliance with the Province's legislation and standards for child day care facilities.

Department of Transportation and Infrastructure

Capital Maintenance of Highways (2012)

This chapter examines whether capital road repairs, identified as necessary by the Department, are made on a timely basis.

Public-Private Partnership: Eleanor W. Graham Middle School and the Moncton North School (2011)

This chapter examines the process for identifying the two school project as potential P3 agreements and evaluates the value for money assessment on which the Department's decision to recommend the P3 approach for the two school project was based.

Review of Nursing Home Contract with Shannex Inc. (2009)

This chapter examines various questions surrounding the contract with Shannex Inc. to supply nursing home beds.

Management of Insurable Risks to Public Works Buildings (2003)

This chapter examines how the Department manages significant insurable risks for the public works buildings it is responsible for.

Department of Tourism, Heritage and Culture

New Brunswick Art Bank (2010)

Our objective for this project was to ensure that all art works acquired for the provincial Art Bank can be accounted for and are being adequately protected, maintained and conserved.

Government-wide projects

Review of Departmental Annual Reports (2008)

Our primary objective for this project was to determine the degree to which departmental annual reports and our government's reporting on performance could be improved by applying state-of-the-art principles. Our secondary objective was to determine what enhancements might be recommended for the Province's annual report policy.

Program Evaluation in Government Departments (2004)

Our objective for this project was to determine the approach to program evaluation employed by provincial departments.

Crown agency projects

Crown Agency Governance (2003)

This chapter summarizes the results of our governance reviews over the past five years, reviews practices in other jurisdictions, and makes major overall recommendations on steps the Province can take to improve Crown agency governance.

New Brunswick Investment Management Corporation Investment Performance and Cost Analysis (2008)

This chapter looks at some indicators of the New Brunswick Investment Management Corporation's investment performance, and provides an analysis of the costs of the organization.

New Brunswick Investment Management Corporation Governance (2006)

This chapter examines whether current governance structures and processes established for the New Brunswick Investment Management Corporation set a framework for effective governance.

New Brunswick Liquor Corporation Agency stores (2010)

This chapter examines whether the New Brunswick Liquor Corporation has appropriate control procedures for its agency store program.

NB Power

Governance (2005)

This chapter examines whether the current governance structures and processes established for NB Power set a framework for effective governance.

Regional Development Corporation

Provincially Funded Programs and Projects (2004)

This chapter examines whether the Regional Development Corporation has satisfactory procedures in place to measure and report on the effectiveness of the provincially funded programs and projects it administers.

Service New Brunswick

Property Assessment for Taxation Purposes (2005)

This chapter examines whether Service New Brunswick complies with the *Assessment Act* by assessing real property at "real and true value".

Appendix B

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Detailed Status Report of Recommendations Since 2008	etailed Status Report of Recommendations Since 2008	28
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Appendix B Detailed Status Report of Recommendations Since 2008

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Status
Investment Performance and Cost Analysis	NBIMC	2008	2	2	48	We recommended NBIMC disclose the actual performance of the individual unit trust funds in the Corporation's annual report.	Disagreed
Investment Performance and Cost Analysis	Finance	2008	2	2	56	We recommended the Minister of Finance provide NBIMC with clearly defined performance expectations including targets.	Implemented
Investment Performance and Cost Analysis	Finance	2008	2	2	106	We recommended the Minister of Finance commission an independent technical assessment of NBIMC's investment policy inclouding the asset mix decision for each of the three pension funds.	Implemented
Investment Performance and Cost Analysis	Finance	2008	2	2	108	We recommended the Minister of Finance re-examine the Province's approach to the investment management of its large funds and identify opportunities where NBIMC could provide advice, investment management and trustee services.	Not Implemented
Investment Performance and Cost Analysis	Finance	2008	2	2	120	We recommended the Minister of Finance document a formal pension plan funding policy for the Public Service Superannuation Plan, Teachers' Pension Plan and the Provincial Court Judges' Pension Plan.	Not Implemented
Investment Performance and Cost Analysis	Finance	2008	2	2	200	We recommended, as part of its performance expectations, the Minister of Finance establish value-added targets for NBIMC's function of actively managing investments.	Implemented
Investment Performance and Cost Analysis	NBIMC	2008	2	2	212	We recommended NBIMC include, in its annual report, information about its incentive program.	Implemented
Investment Performance and Cost Analysis	NBIMC	2008	2	2	216	We recommended NBIMC include more performance information in its annual report.	Implemented
Investment Performance and Cost Analysis	NBIMC & Finance	2008	2	2	219	We recommended the Minister of Finance and NBIMC agree on a formula to establish the total amount of incentive pay that NBIMC may distribute each year.	Not Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Status
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	33	As part of the inspection process, we recommended the Superintendent of Credit Unions assess the systems that collect and produce data in the financial analysis from the stabilization boards, in order to determine whether he can rely on the information.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	41	We recommended the Superintendent find a regular and consistent way of monitoring the quality and liquidity of the stabilization fund of RMA.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	53	We recommended the Superintendent establish a process to satisfy himself as to whether the identified weaknesses in the inspection process are significant, and if so, perform compensating procedures in order to address those weaknesses.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	59	We weath and the Superintendent ensure that appropriate safeguards are in place to eliminate or reduce potential threats to the independence of the auditors of credit unions.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	63	We recommended the Superintendent of Credit Unions inspect the stabilization boards annually.	Not Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	67	We recommended more frequent monitoring information be provided to the Superintendent to monitor the quality and liquidity of RMA's stabilization fund.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions & Justice	2008	2	3	73	We recommended the Department pursue changes to the position classifications to allow the branch to attract qualified, experienced professionals, enabling it to fill the vacant positions necessary to fulfill its duties.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions	2008	2	3	87	We recommended the Superintendent monitor the compliance of credit unions and stabilization boards with the <i>Credit Unions Act</i> with regard to business operations.	Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions & Justice	2008	2	3	101	We recommended the [Department of Justice and Attorney General] comply with the requirements of the annual report policy with respect to the content concerning the work of the Superintendent of Credit Unions in its annual report.	Not Implemented
Superintendent of Credit Unions	Superintendent of Credit Unions & Justice	2008	2	3	105	We recommended the Department examine the conflicting roles of the Superintendent and make changes where appropriate.	Not Implemented
Environmental Impact Assessment	Environment and Local Government	2008	2	4	67	We recommended Appendix C of the Registration guide be amended to require public meetings to be held during the determination review phase for every registered project unless the proponent is able to provide evidence to the branch that such a meeting would not add value to the public consultation process.	Disagreed
Environmental Impact Assessment	Environment and Local Government	2008	2	4	69	We further recommended a representative of the branch should attend each public meeting held during the determination review phase of a proposed project.	Not Implemented
Environmental Impact Assessment	Environment and Local Government	2008	2	4	102	We recommended the DENV website provide, on a project by project basis, a rationale for certificates of determination and EIA approvals issued and explanations as to how major concerns raised by the proponent and/or stakeholders during the review process have been addressed.	Disagreed
Environmental Impact Assessment	Environment and Local Government	2008	2	4	142	We recommended DENV should develop, implement, and maintain a formal monitoring process that allows it to adequately monitor proponent compliance with conditions of Certificates of Determination and EIA approvals and commitments made in registration and other documents. Such a process should include the requirement for the Project Assessment and Approvals ranch to verify proponent assertions about their compliance with those conditions.	Not Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Status
Environmental Impact Assessment	Environment and Local Government	2008	2	4	144	We also recommended DENV should present sufficient information on its website to keep the public up to date about the compliance status of projects for which Certificates of Determination or EIA approvals have been issued.	Disagreed
Environmental Impact Assessment	Environment and Local Government	2008	2	4	161	We recommended the Project Assessment and Approvals Branch develop and implement an effectiveness reporting system for the EIA program.	Not Implemented
Environmental Impact Assessment	Environment and Local Government	2008	2	4	177	We recommended DENV complete its review of the EIA Regulation and make necessary modifications to the Regulation to bring it up to date.	Not Implemented
Environmental Impact Assessment	Environment and Local Government	2008	2	4	178	Further, we recommended Schedule A to the Regulation be reviewed to ensure that all types of projects that could potentially have a significant negative impact on the environment are listed for registration, thereby making the list comprehensive and establishing branch responsibility for the coordination of all EIAs.	Not Implemented
Timber Royalties	Natural Resources	2008	2	5	76	We recommended the Department of Natural Resources record timber royalty revenue on a gross basis and record an expenditure for the amount deducted from royalty payments by licensees to cover the costs incurred in the management of Crown lands.	Implemented
Timber Royalties	Natural Resources	2008	2	5	84	We recommended the Department implement a new system to determine fair market value.	Disagreed
Timber Royalties	Natural Resources	2008	2	5	88	We recommended the new system establish royalty rates on a regional basis.	Disagreed
Timber Royalties	Natural Resources	2008	2	5	92	We recommended the Department implement a new timber royalty system that allows the royalties charged to reflect changes in market indices on a frequent basis, which would be at least quarterly.	Disagreed
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.205	The Department should determine the relevance of its current strategic approach ("Policy Statement on Adult and Lifelong Learning") and update it as necessary.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.205	To enhance the strategic direction for its adult literacy support, the Department should develop strategies to increase public awareness of New Brunswick's literacy situation and the programs available, and to promote improvement in literacy skills.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.205	To provide better strategic direction for its adult literacy support, the Department should ensure that strategic documents identify target groups and their needs for adult literacy programs.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.205	To facilitate the implementation of its strategic plan for adult literacy support, the Department should ensure that each action is specific and accompanied by a time frame.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.211	The Department should review the purpose of the Minister's advisory group, and its role in developing strategic direction, and make changes to its documented terms of reference as necessary.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.211	The Department should ensure that the representation in the Minister's advisory group and the frequency of its meetings allow the advisory group to serve its purpose.	No longer applicable
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.214	To enhance the accountability for its adult literacy support, the Department should ensure an agreement is signed with each grant recipient.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.214	To ensure the terms of an agreement are followed, the Department should assign the responsibility for monitoring agreements with grant recipients.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Status
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.218	The Department should review the purpose of its relationship with Literacy New Brunswick Inc. and continue the relationship only if Literacy New Brunswick Inc. becomes an active vital organization (with full board representation, regular meetings, a strategic plan, an operating plan and compliance with its by-laws.)	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.218	The Department's "Community Adult Learning Program - Procedures Manual" (May 2006) provides the Department's expectations of a Regional Literacy Committee. The manual indicates a committee needs an organizational structure, a strategic plan, an operational plan and should meet at least four times a year. The Department should have the same, if not greater, expectations of sound organizational practices from Literacy New Brunswick Inc. as it has from the Regional Literacy Committees.	No longer applicable
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.221	To obtain consistent assurance of "relative uniformity in the effective delivery of literacy programs in the Province," ¹ the Department should develop documented monitoring and reporting procedures. The procedures could address each of the monitoring responsibilities assigned to the Regional Literacy Coordinators. Among others, they could include: monitoring Regional Literacy Committees to ensure they are operating within their Terms of Reference; monitoring visits to literacy classes (frequency and timing); documenting visits; following-up on identified issues; and reporting the monitoring results to central office to be used for improving the program.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.221	To provide central office with relevant and useful information and to aid the Regional Literacy Coordinators in conducting consistent and efficient monitoring visits, the Department should develop a common form for documenting the monitoring visit. The form could have a list of items to verify at the literacy class. It could allow the Regional Literacy Coordinator to identify areas of non-compliance with the CALP guidelines and comment on specific needs of the literacy class. And, the form could allow follow-up comments to indicate that issues and needs are later resolved.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.221	To obtain the most value from its monitoring, the Department should ensure that monitoring information is used in the program's planning.	Not Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.224	 monitor and assess performance of its support to adult literacy. Additional performance indicators should be developed. 	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.224	For continuous improvement to its support to adult literacy, the Department should use its performance results to revise its strategic direction and control procedures.	Implemented
Adult Literacy Services	Post-Secondary Education, Training and Labour	2008	2	6	p.226	To provide better accountability to the Legislative Assembly and the public, the Department should report on the performance of its support to adult literacy in its annual report.	Implemented
Review of Departmental Annual Reports	Executive Council	2008	2	7	32	Therefore, we recommend the Executive Council develop legislation for an enhanced performance reporting regime in New Brunswick. The legislation should reflect the principles of the Canadian Institute of Chartered Accountants' Statement of Recommended Practice on Public Performance Reporting.	Not Implemented

¹ Community Adult Learning Program – Procedures Manual, May 2006, Page 1.

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	219	We recommend the [Department of Justice and Attorney General] ensure that the current requirements of Sections 242 and 242.1 of the <i>Credit Unions Act</i> are sufficient to ensure that a credit union can only transfer from one federation and the stabilization board established in relation to that federation to the other federation and the stabilization board established in relation to that federation if the underlying circumstances warrant the transfer.	Implemented
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	220	We recommend the [Department of Justice and Attorney General] ensure that the <i>Credit Unions Act</i> places both the power to inspect a credit union and the power to put a credit union under supervision in the same organization.	Implemented
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	221	We recommend the [Department of Justice and Attorney General] ensure that Section 246(3) of the <i>Credit Unions Act</i> is sufficient to ensure that a credit union that has been placed under supervision is in fact under supervision during any appeal process.	Implemented
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	222	We recommend the [Department of Justice and Attorney General] ensure that the <i>Credit Unions Act</i> gives the Superintendent of Credit Unions sufficient power to ensure that only auditors with the requisite skills, experience and independence are appointed auditors of credit unions.	Implemented
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	223	We recommend the Superintendent of Credit Unions be independent of the [Department of Justice and Attorney General], and have the resources needed to properly supervise the credit union system.	Not Implemented
La Caisse populaire de Shippagan	Justice and Attorney General	2009	1	1	224	We recommend Executive Council ensure that term limits exist for all members of the governing bodies of provincial Crown corporations, agencies, boards and commissions. If existing members of governing bodies have been in place for a long period of time, there should be a transition plan to replace them. The length of the transitional period should be inversely proportional to the length of time the board member has served.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	33	The Department should ensure the Minister's advisory committee actively operates in compliance with legislation. The representation on the Minister's advisory committee and the frequency of its meetings should allow the advisory committee to serve its purpose.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	34	The Department should document clearly the committee's terms of reference, which should include its role and responsibilities.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	35	The Department should develop an orientation program for new committee members.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	42	With the assistance of the Minister's advisory committee, the Department should complete its strategic framework for provincial testing of students.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	48	With the assistance of the Minister's advisory committee, the Department should determine and document its purpose for provincial testing.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	69	In consultation with its stakeholders, the Department should challenge its current provincial testing schedule, explore alternatives for obtaining the information required to serve its purpose with the least disruption to the students' learning time, and revise its provincial testing schedule as needed.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	73	The Department should monitor all testing done by schools and districts that is similar to provincial testing.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	74	The Department should monitor the amount of students' learning time that is used for preparing for and writing provincial testing and all other similar testing done by the districts and schools to ensure that it is not excessive.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	75	The Department should develop practices to ensure that different testing of students complements one another and there is no duplication of efforts.	Not Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	83	The Department should strengthen the process for providing accommodations for students with special needs to ensure that: • all eligible students receive accommodations and in the form to which they are entitled; and • only eligible students receive accommodations and only in the form to which they are entitled.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	91	The Department should document a policy on reporting individual students' results on provincial tests.	Not Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	92	The Department should assess its information system needs with regards to reporting the results of provincial testing and ensure that its needs are met.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	93	The Department should ensure that the results of provincial testing are easily identified on its web site.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	102	The Department should develop documented policies and procedures for the provincial testing program.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	103	The Department should provide training, as necessary, to help ensure the policies and procedures are understood and followed. This should include training teachers on the administrative guidelines and the use of provincial testing results.	Implemented
Provincial Testing of Students Anglophone Sector	Education and Early Childhood Development	2009	3	2	104	The Department should develop and implement quality control practices to ensure the policies and procedures are followed and updated as needed.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	43	We therefore recommended the Department establish clearer objectives for the Environmental Trust Fund.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	46	We recommended the Department annually make public its priorities for the types of projects that it wants to fund from the Environmental Trust Fund.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	58	Because we found the flowchart useful, we recommended the Department enhance the one page flowchart of the Environmental Trust Fund application process to include a brief description of certain steps and should post the flow chart on the Environmental Trust Fund web site.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	66	We recommended the Department provide potential applicants with the program guidelines and criteria.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	69	We recommended the program eligibility and assessment criteria should indicate how other sources of funding are to be assessed.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	81	We recommended the Department ensures that it follows the written protocol for in-year ETF applications.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	95	We recommended the Department document the criteria it uses to determine which projects will be inspected through onsite visits.	Implemented
Environmental Trust Fund	Environment and Local Government	2009	3	3	105	We recommended the Department's annual report include more information about the performance of the Environmental Trust Fund.	Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	21	We recommend the Province should provide future funding to NBIF on a year-by-year basis due to the significant financing costs associated with providing multiple year funding.	Not Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	22	We recommend the Province explicitly assign responsibility to [Economic Development] for communicating government performance expectations to NBIF, and monitoring and reporting on NBIF's performance in order to ensure that adequate accountability exists for the arrangement.	Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	23	We recommend [Economic Development] should ensure that regular reconciliations are performed verifying that money drawn from the Trust agrees with that reported in NBIF's financial statements.	Not Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	24	We recommend, in order to simplify and potentially reduce the cost of the funding process, the Province should terminate the Trust as allowed under the Deed of Settlement and Trust, and have [Economic Development] simply fund NBIF directly as part of a contractual arrangement.	Not Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
New Brunswick Innovation Foundation	Economic Development	2009	3	4	25	Further to that, we recommend [Economic Development] should require NBIF to sign a letter of agreement before transferring additional funds to the Trust. That letter of agreement should clearly document: • The amount and timing of funding to flow from [Economic Development] to NBIF, the period covered, and any significant details relating to the process for NBIF accessing those funds. • [Economic Development] performance expectations for NBIF relating to its delivery of innovation funding. Those performance expectations should include: • Expected program outcomes to be achieved by NBIF; • A requirement for NBIF to be covered by and compliant with the provincial Auditor General Act, giving our Office the legal right to conduct compliance and performance audits at NBIF and report the results of those audits to the Legislative Assembly; • A requirement for periodic independent evaluations of the delivery of innovation funding through NBIF using recognized evaluation standards; and • A requirement for NBIF to apply public sector values in delivering innovation funding for the Province. This should include a requirement for NBIF to adopt a code of conduct, including conflict-of-interest guidelines, that is signed by all board members and staff. It should also include a requirement that NBIF be as publicly open as possible regarding access to information on the agreements, objectives, activities, and achievements with appropriate provisions being made for legitimate concerns of personal privacy, commercial confidence, and intergovernmental negotiations. Reporting required by [Economic Development] from NBIF. Required reporting should facilitate [Economic Development] monitoring and effectiveness reporting related to all aspects of NBIF's performance. • A requirement for both parties to comply with terms of the operational memorandum of understanding signed by [Economic Development] and NBIF. • Specific remedies available to [Economic Development] and NBIF. • Specific remedies available to [Economic Developm	Not Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
New Brunswick Innovation Foundation	Economic Development	2009	3	4	26	We recommend, in order for [Economic Development] to effectively monitor NBIF and provide a basis for public performance reporting on the arrangement, [Economic Development] should ensure that: • Government performance expectations are communicated to NBIF annually, • Appropriate, sufficient reporting is being provided to [Economic Development] by NBIF to allow the department to evaluate the degree to which NBIF has met government performance expectations, • Regular report review processes have been implemented within [Economic Development], and • Processes have been developed and implemented covering action to be taken by [Economic Development] when NBIF performance is not as expected.	Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	27	We recommend [Economic Development] should publicly report information on the extent to which the arrangement with NBIF has accomplished its provincial policy objectives, and at what cost, in its annual report.	Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	28	We recommend [Economic Development] should table evaluation reports related to the arrangement in the Legislative Assembly because of the value of those reports as inputs to public policy decisions associated with the delivery of innovation funding.	Not Implemented
New Brunswick Innovation Foundation	Economic Development	2009	3	4	29	We recommend [Economic Development] should carefully consider the ramifications of the potential conflict for government representatives on the NBIF board between their fiduciary duties as board members and their assigned roles as protectors of the provincial interest relating to innovation funding delivered through NBIF. Action should be taken to mitigate any identified risks. The simplest option would be to eliminate the requirement that provincial representatives sit on the board of NBIF, or as a minimum remove their voting rights as board members.	Not Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	9	We recommended the Province expand the Ombudsman's legislation to provide him with jurisdiction over Nursing Homes.	Not Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	35	We recommended the [Department of Transportation and Infrastructure] formally document the definition of "urgent situation."	Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	36	We recommended the [Department of Transportation and Infrastructure] put in place a process to ensure that the reason for exemption entered into the purchasing system is consistent with the signed purchase order approval.	Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	37	We recommended the [Department of Transportation and Infrastructure] implement a process to ensure that departments are adequately documenting and maintaining on file the justification for exemptions for emergency or urgent situations.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	48	We recommended the Department of Social Development put in place a formal mechanism to assess the success of the pilot project they have entered into with Shannex.	Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	54	We recommended the Department of Social Development document its due diligence activities when assessing significant contracts.	Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	62	We recommended the Department of Social Development prepare and document a risk assessment of the Shannex contract and identify any mitigating actions that should be put in place.	Not Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	72	We recommended the Department of Social Development start planning a replacement tender in year three of the current contract.	Not Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	75	We recommended the Department of Social Development put in place a plan for how residents would be accommodated through any future move that could be required at the expiration of the contract term.	Not Implemented
Review of Nursing Home Contract with Shannex	Social Development and Transportation and Infrastructure	2009	3	5	77	We recommended the [Department of Transportation and Infrastructure] ensure that all purchase orders issued properly reflect the value of the services purchased, and in the correct currency.	Implemented
Financial Assistance to Industry	Economic Development	2010	2	2	31	We recommended the Department establish additional measurable targets for FAIP to allow it to evaluate FAIP from different perspectives.	Not implemented
Financial Assistance to Industry	Economic Development	2010	2	2	43	We recommended the Department investigate why required documents are not being submitted on a timely basis and seek alternative ways to obtain timely information from its clients.	Implemented
Financial Assistance to Industry	Economic Development	2010	2	2	53	We recommended the Department establish policies and procedures with respect to verifying clients' financial information other than their audited financial statements.	Not Implemented
Financial Assistance to Industry	Economic Development	2010	2	2	62	We recommended the Department establish policies and procedures on how to verify information provided by assistance clients prior to forgiving loans.	Implemented
Financial Assistance to Industry	Economic Development	2010	2	2	75	We recommended [Economic Development] establish policies and procedures regarding which types of financial analysis should be performed to identify risk of potential loss and which types of mitigation steps should be taken based on the risks identified.	Disagree

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Financial Assistance to Industry	Economic Development	2010	2	2	94	We recommended the Department report to the Legislative Assembly on the success of FAIP in achieving the Department's targets.	Not implemented
Financial Assistance to Industry	Economic Development	2010	2	2	105	We recommended [Economic Development] put in place a monitoring process that directly assesses each forgivable loan recipient's progress compared to the original payback calculation. This assessment should look at each of the three components of the original payback calculation; the risk factor, the estimated amount of incremental payroll and the income tax rate.	Disagree
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	45	The Secretariat should make information concerning immigration representatives widely available, including what an applicant should expect in their arrangements with an immigration representative.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	46	The Secretariat should consider providing their website information on the Provincial Nominee Program in the languages of the countries of the program's target markets.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	67	The Secretariat should develop and implement appropriate monitoring procedures for the Provincial Nominee Program.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	68	The Secretariat should ensure that the revised business applicant category is supported with documented policies and procedures, forms and records relating to the \$75,000 conditionally refundable deposit, and appropriate controls over the receipt and disbursement of the deposits.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	69	Roles and responsibilities for monitoring the landed nominees' business activities should be clearly assigned to staff members. Staff members involved with the new conditionally refundable deposits (receiving, recording, monitoring, refunding, etc.) should be properly trained.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	70	The Secretariat should ensure the \$75,000 conditionally refundable deposits, which are required from business nominees, are properly recorded in a separate account and reconciled on a regular basis to the status of the program's business nominees.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	71	The Secretariat should obtain additional resources needed to adequately monitor the business activities of landed nominees.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	77	The Secretariat should ensure all staff members are fully aware of the policy on conflict of interest and have a clear understanding of how it applies to their work and the Provincial Nominee Program.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	78	The Secretariat should ensure the Provincial Nominee Program is adequately supported with documented policies and procedures.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	84	The Secretariat should ensure that a pilot project is properly planned and documented before it is implemented.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	85	The Secretariat should obtain written agreements with parties involved in delivering pilot projects, which clearly state their responsibilities and provides a reporting framework or communication plan for proper accountablity.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	86	The Secretariat should ensure each pilot project is evaluated.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	90	The Secretariat should examine its organizational structure and consider re-positioning the settlement and multiculturalism branch so that it operates under the same direction as the PNP, within the immigration division.	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	104	The Secretariat should ensure the Provincial Nominee Program operates in compliance with the <i>Canada-New Brunswick Agreement</i> .	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	105	The Secretariat should develop and implement an evaluation plan which allows it to measure performance of the Provincial Nominee Program and determine if the program meets its objective "to increase the economic benefits of immigration to New Brunswick". Corrective action should be taken to address deficiencies identified by the evaluation.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	108	The Secretariat should establish program goals, performance indicators and monitoring procedures for evaluating performance of the Provincial Nominee Program.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	111	The Secretariat should develop and implement an approach to regularly measure performance of the Provincial Nominee Program and compare performance to the objectives and targets stated in the "Population Growth Strategy".	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	118	The Secretariat should review the objectives and targets relating to immigration stated in the Strategy and establish a specific action plan for achieving their objectives and targets.	Not implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	119	The Secretariat should develop annual operational plans to be used in day-to-day work, which would result in the achievement of the annual targets shown in the <i>Population Growth Strategy</i> .	Implemented
Immigration with the Provincial Nominee Program	Post-Secondary Education, Training and Labour	2010	2	3	123	To provide better accountability to the Legislative Assembly and the public, the Secretariat should report on the performance of the Provincial Nominee Program both on its website and in the Department's Annual Report.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
New Brunswick Art Bank	Tourism, Heritage and Culture	2010	2	4	37	We recommended risks associated with the security of the Art Bank database be addressed.	Implemented
New Brunswick Art Bank	Tourism, Heritage and Culture	2010	2	4	38	We recommended [Tourism, Heritage and Culture] take steps to eliminate the risk associated with the lack of division of duties identified above. One option might be for someone other than the Art Bank Coordinator to be given responsibility for entering information into the Art Bank database.	Implemented
New Brunswick Art Bank	Tourism, Heritage and Culture	2010	2	4	39	We recommended Art Bank staff provide regular reporting on the status of the Art Bank collection to [Tourism, Heritage and Culture] senior management.	Not implemented
New Brunswick Art Bank	Tourism, Heritage and Culture	2010	2	4	49	We recommended Art Bank staff ensure that storage space at Kings Landing is adequate and that all artworks are appropriately protected while in storage there.	Not Implemented
New Brunswick Art Bank	Tourism, Heritage and culture	2010	2	4	63	We reommended the Department determine if the current program objective of accumulating and maintaining a permanent collection of the work of New Brunswick visual artists continues to be an achievable goal, or whether it should be altered in recognition of the limited resources available to the Art Bank. If the goal is still considered appropriate, [Tourism, Heritage and Culture] should allocate adequate funding to the Art Bank to allow all artworks to be maintained in good condition on an ongoing basis.	Not Implemented
New Brunswick Art Bank	Tourism, Heritage and culture	2010	2	4	75	We recommended Art Bank staff consider and, where feasible, implement other options for increasing the public exposure of the collection.	Implemented
New Brunswick Art Bank	Tourism, Heritage and culture	2010	2	4	79	We recommended [Tourism, Heritage and Culture] present performance information for the Art Bank in its annual report.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	36	We recommended future reviews of ANBL's retail network include an assessment of all service delivery methods, and not be limited to the current retail network structure.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	42	We recommended ANBL document any full store reviews it conducts. This process should contain the necessary information to support any retail network decisions.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	51	We recommended ANBL establish terms of reference for the Agency Stores Committee.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	55	ANBL should ensure that a criminal record check is performed before awarding an agency store.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	58	We recommended any changes made to the recommendation report by the Agency Stores Committee be approved and recorded in the minutes of the committee.	Implemented

Chapter Name	Department/ Agency	Year	Volume	Chapter	Par.	Recommendation	Self Reported Status
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	We recommended the Applicant Visit Checklist be completed, in every case. If a section of the checklist not applicable for an applicant, it should be so noted an explanation of the reason.		Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	73	We recommended ANBL comply with their Disposal of Assets Policy. In particular ANBL should determine and document the value of all assets involved in the potential purchase of an existing store property.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	75	ANBL should make changes to the Agency Store Program to requiring ANBL to provide a detailed list of assets to be disposed in circumstances involving the purchase of an existing liquor store property.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	77	ANBL should revise the Agency Store Program to require potential applicants to specifically list the assets their offer covers when the offer contains a commitment to purchase the existing liquor store property.	Implemented
Agency Stores	New Brunswick Liquor Corporation	2010	2	5	108	We recommended ANBL review their approach to monitoring agency store compliance to ensure the methods and procedures used are cost effective and efficient taking into consideration the risk areas of concern to ANBL.	Implemented

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