



Annual Report of the Chief Electoral Officer

April 1, 2012 - March 31, 2013



**ELECTIONS
NOVA SCOTIA**

Elections Nova Scotia is the independent, non-partisan agency responsible for conducting provincial elections.

Elements of our Strategic Plan

Mission

Elections Nova Scotia is the independent, non-partisan agency responsible for conducting provincial elections in Nova Scotia.

Mandate

Elections Nova Scotia must be prepared at all times to conduct a provincial general election, by-election, or plebiscite. It is responsible for enforcing provincial electoral law, including the political financing regime.

Elections Nova Scotia is also mandated to conduct voter education and information programs, and to provide support to the independent commission charged with reviewing the boundaries of provincial electoral districts.

Elections Nova Scotia is responsible for the establishment and maintenance of election-related data, including the Nova Scotia Register of Electors, and may carry out studies related to the electoral process in the pursuit of its mandate.

Values

- Integrity of the electoral process is paramount
- Transparency in everything we do
- Responsiveness to meet the needs of Nova Scotians in the electoral process
- Cohesiveness and consistency in administering the laws under which we operate
- Trustworthiness
- Continuous improvement of systems, policies, and procedures

Goals

- To conduct high quality electoral events
- To maintain accurate registers
- To deliver high quality election information and education
- To continuously develop individual and organizational effectiveness

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May 6, 2013

The Honourable Gordie Gosse
Speaker of the Legislative Assembly
Province of Nova Scotia
1726 Hollis Street, Province House
Halifax, NS
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Dear Mr. Speaker,

I have the honour to present the Annual Report of Elections Nova Scotia for April 1, 2012 to March 31, 2013 and respectfully request that you submit this report to the House of Assembly.

Respectfully submitted,



Richard P. Temporale
Chief Electoral Officer



**ELECTIONS
NOVA SCOTIA**



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Introduction

Over the past 20 years, electoral management has grown exponentially more complex requiring ever more specialized skills. Changes in technology, higher standards, increased expectations and challenges to effective and fair elections have called for an environment of continuous improvement.

The period between elections allows for the introduction of new procedures, policies, and processes. It is when new products – manuals, forms, brochures, web materials, and videos – are developed and produced. It is when legislation is reviewed and updated.

The work of an electoral management body (EMB) like Elections Nova Scotia can be divided into four areas: maintaining a permanent register of electors and electoral geography; field operations; policy, research and communications; and electoral finance.

Maintaining a permanent register of electors includes associating each eligible voter with a specific place, which is the basis of where and for which candidates an elector may vote.

This involves database management and continuous updating of the Register of Electors, and a sophisticated Geographic Information Services (GIS) component that assigns all Nova Scotia electors to one of more than 2,000 polling locations throughout the province. The challenges of maintaining the Register of Electors are discussed in greater detail under the Municipal Returning Officers Forum and in Appendix II.

The field operations division is responsible for selecting and training returning officers and training field staff; developing policies and procedures, manuals, forms and tools that facilitate registration of voters, voting and managing the election; and managing the supply of goods and services for an election from ballots to telephone connections for returning offices. Once an election is called, ENS grows from a base of 17 people to more than 6,000 election workers across the province. The past year has been dedicated

“Once an election is called, ENS grows from a base of 17 people to more than 6,000 election workers across the province.”

to selecting returning officers, training and other “election readiness” activities.

Policy, research, and communications includes public education and information programs, outreach programs, answering questions of electors during an event and between elections, and the production and distribution of publications in print, electronic and video formats. New voting opportunities enabled by the changes to the *Elections Act* will be communicated through various media and advertising programs in the coming months.

Electoral finance is responsible for overseeing political financing and regulations governing registered parties, candidates, electoral district associations

and third parties with respect to compliance with the *Elections Act*; the financial returns for registered parties that receive public financing, candidate electoral campaign returns for elections and by-elections and the accounting and finance operations of Elections Nova Scotia.

The four areas of electoral management described are common across all modern democracies. All EMBs in Canada, regardless of the size of the jurisdiction, must provide these services professionally. The integrity of our elections depends on it.

Electoral Boundaries Implementation

With an effective date of January 1, 2013, new electoral districts were established as the report of the Electoral Boundaries Commission was accepted and the *House of Assembly Act* amended.

With the 51 new electoral districts came the need to dissolve many electoral district associations (EDA) where significant changes warranted, and to register new EDAs. The registered parties lead the activity to have the EDA registrations submitted to ENS to meet an end of fiscal year deadline.

Maps of the new electoral districts have been completed and distributed to the registered parties. Copies are available on the Elections Nova Scotia website at www.electionsnovascotia.ca

Recommended changes to the *Elections Act*

The current edition of the *Elections Act* (the “*Act*”) was proclaimed December 21, 2011, and came into force January 1, 2012. Since then, certain deficiencies in the *Act* have been identified by Elections Nova Scotia (“ENS”) or brought to the attention of ENS staff by political parties, electoral district associations, potential candidates or members of the Election Commission.

Some of the deficiencies occur simply because the *Act* is silent on a subject. Others occur where the *Act* is unclear, requiring the reader to attempt to interpret the intentions of the legislature, rather than apply the *Act* with certainty.

Definition of Election Expenses

The definition of ‘election expenses’ does not include the necessary close-out costs of an election office and costs for a candidate to travel outside their electoral district to attend a provincial rally or meeting. After consultation with the Nova Scotia League of Equal Opportunities and the Nova Scotia Disabled Persons Commission, it became clear that the *Act* does not exclude from the definition of ‘election expenses’ costs necessary for disabled candidates to campaign.

An amendment to the *Act* specifically allowing for the close-out costs of an office for seven days after election day, the costs for a candidate to travel outside their district to attend a provincial rally or meeting, and the incremental costs incurred by a disabled candidate to run in an election is recommended.

Candidate Expenses

There is no fixed date for an election in Nova Scotia yet certain activities are necessary in anticipation of an election. The *Act* is impractical in how it deals with

this issue. As an example, the registered parties often choose their candidates in anticipation of an election. There are only a few manufacturers of campaign signs in Nova Scotia. In the past, electoral district associations purchased signs on behalf of their candidate and stored them until the writ was issued. Once the writ was issued, the candidate would purchase the signs from the electoral district association and use them. The current wording in the *Act* does not recognize these costs as election expenses eligible for reimbursement.

While the *Act* does allow for the transfer of services, money, or property between a registered party and any of its electoral district associations and candidates, it prohibits transfers if such expenditures would be considered ‘election expenses’ during the writ period.

It is proposed that an amendment to the *Act* be made to allow for the transfer of literature, objects, or materials of an advertising nature from an electoral district association to a candidate and an explicit reference be added in the *Act* that materials consumed during the writ period (i.e. literature, objects, or materials of an advertising nature) be allowable expense transfers from an electoral district association to a candidate, but that materials consumed pre-writ are not.

Contribution Limits for Independent Candidates

The *Act* establishes contribution limits for candidates with a party affiliation but it fails to establish contribution limits for independent candidates.

Therefore, we request an amendment to the *Act* which specifically establishes contribution limits for independent

candidates at five thousand dollars, in accordance with the limits set for candidates with a party affiliation.

Contributions From Fundraising Events

It appears that there was a drafting oversight when subsection 246(2) was drafted as it fails to include registered third parties.

Subsection 246(2) should read:

(2) Where the total amount paid by an individual for a fundraising event held on behalf of a registered party, electoral district association, candidate or registered third party minus the value of the benefit, which equals the cost of the event, received by the individual is more than fifty dollars, the amount of the fee paid that exceeds the benefit received is a contribution to the registered party, electoral district association, candidate or registered third party and the contribution is attributable to the individual who paid the fee.

Purchasing Tickets to Events

The *Act* provides that an individual resident in the Province may make a contribution to a candidate, electoral district association or registered party but no corporation, partnership or trade union (an “organization”) may make a contribution to a registered party, electoral district association, candidate or registered third party.

The language in the *Act* fails to specifically prohibit an organization from purchasing tickets to events, a portion of which is a political contribution. In order to avoid any confusion and to prevent abuse, an amendment to the *Act* is recommended to prohibit the purchase of tickets to such events by an organization.



Contributions by Will

The Act allows for contributions by an individual to each registered party, their electoral district associations and the candidates of that registered party, up to \$5,000 in any calendar year.

The Act also provides that an estate may make contributions to registered parties and electoral district associations but an estate is treated like a person and also limited to a maximum contribution of \$5,000.

The members of the Election Commission have suggested that the registered parties should be able to accept contributions made by an estate in excess of \$5,000. It would not be possible for the personal representative, as trustee, to dispose of the entirety of the bequest in one calendar year if the bequest exceeded \$5,000.

If the Act was amended to accommodate larger bequests and the contribution was to extend over two or more years, there would be an onerous burden on the personal representative of an estate. It would also be unreasonable to deny the ability to wind down the estate as quickly as possible. It would be preferable to the personal representative, the registered parties, and ENS that the personal representative be able to pay out the bequest in its entirety at the earliest possible opportunity. Persons considering gifts to political parties, by bequest might be encouraged to do so, if the rules permitted the entirety of a bequest to be transferred over in one year.

It is proposed that the Act be amended to allow that the total amount of a bequest be sequestered by the registered party or electoral district association immediately and drawn down in annual installments of no more than \$5,000. There should also be a restriction on the ability to borrow against these sequestered funds. They should be held in trust and interest earned should be reported as part of the respective party's or electoral district association's annual reporting requirements.

It is also proposed that the Act be amended to define the word "estate" to make it clear that this specifically refers to a testamentary disposition.

Claiming to be the Candidate of a Political Party

The current wording of the Act does not require that an individual prove that they have the endorsement of a party before registering as a candidate and nothing in the Act prevents them from asserting that they are representing a specific party and soliciting contributions and incurring expenses under the association with the party.

The issue to consider is who is actually harmed by this behaviour. The party who the individual claims to represent may have no intentions of endorsing this candidate and likely would not appreciate someone claiming to be their candidate. Also, this claim could be misleading to the electorate and is therefore of concern to ENS.

In order to clarify this situation, an amendment to the Act is recommended to prevent a candidate from misrepresenting party affiliation to the public. It is recommended that, at registration, all

candidates be deemed independent unless they provide ENS with evidence from the leader of the party that they are registering as the candidate for that party.

Gathering Information of 16 and 17 Year Olds

Young Nova Scotians are vastly under-represented in the Register of Electors. ENS wishes to obtain the same elector registration information regarding 16 and 17 year old Nova Scotians as it does for eligible electors (residential address, mailing address, legal name, sex, contact information, and day, month and year of birth).

Subsection 42(4) of the Act reads: 42(4) Notwithstanding subsection (1), the Register of Electors may contain information about persons who reside in the Province and may become eligible to vote.

The *Freedom of Information and Protection of Privacy Act* establishes a test to be met before the collection of personal information about an identifiable individual is permitted. A portion of the test states, "the collection of that information is expressly authorized by or pursuant to an enactment."

The language in the Act does not clearly authorize the collection of information pertaining to 16 and 17 year old Nova Scotians. Therefore, we request an amendment to the Act which specifically authorizes the collection of personal information pertaining to Nova Scotians who are 16 and 17 years old. This information is to be held in the Register of Electors until they are 18, when their consent to be a registered elector will be requested.

Security and Privacy: Protecting Personal Information in the Register of Electors

Recent security breaches at two Canadian election management bodies have underscored the responsibility to safeguard the privacy of electors. Security breaches leading to a loss of personal information or to unauthorized access, use or disclosure, may be triggered by a problem in the information technology system or, more likely, by a simple error or human negligence.

While most organizations have data security policies, the reported breaches demonstrate that policies alone are not protection. While a stolen lap-top with elector information was protected by encryption and password technology, two missing USB storage devices were neither encrypted nor password protected even though “policy” required both. Moreover, an employee error led to the distribution of unprotected compact discs with personal information of electors to persons not authorized to have the information.

ENS is working to support policy with strong procedures: senior staff accountability, control of storage devices, limited access, authentication systems, staff training and a culture of privacy and security. We have gone to great lengths to ensure that the elector information in our database cannot be downloaded to USB storage devices.

Any disks with elector information we release to parties, candidates, municipalities and school boards are both encrypted and password protected. In the past, computers used in the field were always wiped clean on return from returning offices. In the future, work in the field will be conducted online, directly within our data platform without any chance of the information accessed being downloaded to the computers being used in the field.

Admittedly we remain vulnerable in two areas. Once we release data to parties, candidates, municipalities and school boards under provisions of the *Elections Act* and they have successfully downloaded it to their personal computers, we lose absolute control over the handling and sharing of the files and, therefore, the assurance that all copies, printed and electronic, have been systematically accounted for rests with those with whom we have a data sharing agreement.

Section 62(5) of the *Elections Act* includes safeguards that require a municipality provided with elector information to confirm, in the prescribed manner, within ten days of the close of polls on election day, that all of the elector information provided by Elections Nova Scotia and provided by the municipality to others has been used only for election administration purposes.

Section 62(6) of the *Elections Act* also requires that a school board provided with elector information must destroy all such information received during an election and any copies of elector information provided to others and confirm to the chief electoral officer that the information has been destroyed, within ten days of the close of polls on election day.

Our data sharing agreement sets out the use that may be made of the information provided to municipalities and school boards and asks each to make best efforts to ensure that the information is held in strict confidence. There are similar provisions in the *Elections Act* for provincial political parties, candidates and members of the Legislative Assembly.

As well, Section 62(1) of the *Elections Act* authorizes Elections Nova Scotia to seed the list with fictitious electors. This is

only preventative to the extent that those we share the list with will know we can trace any use or release of elector information back to the source of the misuse.

In the past, some copies of lists made during an election for poll officials were not returned with their supplies after the polls closed. Under the new poll procedures, only two copies of the list per poll will be provided to the poll clerk. One list must stay with the poll records in a sealed envelope for future reference; the other list is returned to the returning office for data entry purposes. If either copy is missing, the returning officer will know and will pursue the offending poll clerk for the missing list.

As a further safeguard, we contacted all retiring and current returning officers asking them to return any and all election information they may have from past elections and to sign a declaration to that effect. ENS will provide full disclosure of any breach and individuals, once notified, will be in a better position to address the potential risks of harm resulting from such breaches. More to the point, ENS is committed to continuous improvement in the protection of personal privacy and will look for ways to strengthen our internal procedures as well as finding ways to improve the practices of those with whom by statute we share elector information.

Proactive Disclosure

Each year, Elections Nova Scotia publishes the Political Contributions Regime Annual Report before June 30. This report lists the names and community names of each contributor to a registered party, electoral district association, or candidate.

In the past, the report, including the residential addresses of the contributors,



New Outreach Activities

was posted on the ENS website. While we published the report in a locked pdf format, we regularly received requests from the media and the public for the file in a format that facilitated sorting and analysis.

We declined the requests as part of our privacy-respecting and secure information handling practices.

Under the new *Elections Act*, the requirement to reveal the contributor's residential address has been dropped in favour of stating just the community name. After consulting Dulcie McCallum, Nova Scotia's Freedom of Information and Protection of Privacy Review Officer, we have decided to post the list of contributors in a searchable spreadsheet format knowing that this proactive disclosure is consistent with protecting privacy.

New Tariff of Fees and Expenses

In October 2012, a new tariff of fees and expenses was passed by an Order in Council. The tariff outlines the rates that will be paid to election workers for their time, as well as expenses. Hourly rates linked to the provincial minimum wage rates were introduced for all election workers.

The hourly pay rates include a premium over the minimum wage which varies according to the election worker position. The former method of compensation was based on fixed fees. This new approach is seen to be fair and equitable and will assist in recruiting qualified election workers.

Registration and Voting Services for Aboriginal Electors

ENS has developed an outreach program specifically for aboriginal electors throughout the province. A brochure on the many ways electors can vote will be prepared in Mi'kmaq and distributed in cooperation with several aboriginal community associations including the Mi'kmaq Native Friendship Centre in Halifax.

“In the next general election ENS will pilot on-campus polling locations.”

As well, ENS will hold information sessions in a number of communities, coordinate write-in-ballot teams to facilitate voting and engage in other communications activity to alert the Mi'kmaq communities to the continuous poll voting opportunities at returning offices.

Student Electors

Student electors participating in the electoral process face distinct challenges. Generally speaking, they are highly mobile and may be unfamiliar with registration and voting procedures.

First, they must determine their place of residence. Secondly, they also need to decide which opportunity of voting best suits their needs.

ENS has established the position of student vote coordinator to work with returning officers to ensure that targeted

revision takes place on campuses and in neighbourhoods where significant numbers of students live; set up polling sites on campus or, when this is not possible, nearby; and to work with student leaders to inform students about the electoral process and their options.

In the next general election ENS will pilot on-campus polling locations that will enable qualified student electors to register and vote regardless in which Nova Scotia electoral district they reside. ENS will provide a write-in ballot and deliver the ballot to the appropriate returning office to be counted on election night.

Acute Care Hospitals

During an election period, electors unexpectedly admitted to hospital may find themselves unable to vote at any polling location. ENS has developed a procedure to allow hospitalized electors in an acute care facility to vote before election day.

Each returning officer is responsible for ensuring that all acute care patients in hospitals in their electoral district are given the opportunity to vote.

Write-in Ballot Coordinator (WIBC) teams will be appointed by the returning officer in each electoral district to ensure that electors who find themselves hospitalized, inside or outside their electoral district, can vote. A write-in ballot hospital supervisor has been appointed to assist each returning officer with the management of WIBC teams needed for hospitals in their electoral district. The returning officer will designate one Hospital WIBC Team for every group of 100 acute care beds.



Municipal Returning Officers Forum

On October 20, 2012, municipal and school board elections were held in communities throughout Nova Scotia. These elections take place every four years and are authorized by the *Municipal Elections Act* and the *Education Act* and are supported provincially by Service Nova Scotia and Municipal Relations. Most municipalities use a List of Electors based on the Register of Electors which is created and maintained by Elections Nova Scotia and shared with municipal returning officers under agreement.

During the election, ENS heard about issues municipal returning officers encountered with their Lists of Electors. The scope of the issues included duplicate elector records, deceased electors still on the list and registered electors at an incorrect address. From an election administrator's perspective, concerns with the accuracy and currency of a List of Electors can bring into question the public's trust in the electoral process.



For this reason, the Chief Electoral Officer invited all municipal returning officers and other stakeholders to a forum held November 6, 2012 in the ENS training facility.

A complete report of that session is appended as Appendix II. ENS thanks the returning officers and others who

participated at the event who quickly saw our common interests in addressing the issues and improving the process and the Register of Electors on which we depend. ENS is committed to acting on suggestions for improvement together with our partners in the data management that contributes to our Register of Electors.

Teen XPO in Halifax

Elections Nova Scotia participated at the Teen XPO, organized by Teens Now Talk, Nova Scotia's magazine by teens, for teens. More than 2,300 students dropped by the ENS booth on November 20 and 21, 2012 to play Run-Vote-Win, the online interactive election game, and to look-up their electoral district using ENS web tools.



Working with the RCMP to investigate complaints

Anyone with reason to believe that an offence under the *Elections Act* has been committed may file a complaint with Elections Nova Scotia. Complaints can come from political parties or candidates as well as from any person, group or association.

Complaints should be submitted in writing and should be accompanied by documents or information supporting the allegation. The first step after a complaint or referral is received is a preliminary review. This review considers whether the complaint or referral falls within the CEO's jurisdiction, whether the complaint is an offence under the *Act*, whether the information provided is sufficient, and whether there may be a basis for an investigation.

At this stage, most complaints are resolved or dismissed after an internal

investigation. If the complaint is not resolved internally, it may be referred to the police for investigation.

One of the challenges of investigating a complaint under the *Elections Act* has been that police investigators are generally unfamiliar with offences under the *Act*. Recognizing this deficit, ENS sought the advice of the Royal Canadian Mounted Police

Division "H". In response, two RCMP officers participated in training sessions in



election operations at ENS.

Consequently, if the chief electoral officer concludes after the preliminary review that the allegations made in connection with a complaint may have merit, the RCMP will carry out investigations of alleged offences under the *Act* or will assist municipal police investigators in CBRM and HRM. An investigation will be conducted with a view to clarifying the facts and gathering the relevant evidence of the alleged offence for the Public Prosecution Service.

Protocol with Nova Scotia School Boards

In December of 2012, Elections Nova Scotia and the school boards of Nova Scotia and the Department of Education endorsed a protocol to be used in assessing schools as possible polling locations during a provincial general election. The protocol deals with evaluation criteria and the paramount concerns of school security and student safety.

There are several compelling reasons to consider schools as polling locations during provincial elections.

The first is that, particularly in rural communities, the local school has displaced the post office as the building that defines the community; beyond its importance in the lives of the students that attend the school, it is often the locus of

public meetings and the centre of social and cultural activity, easily identified by all members in the community.

Secondly, schools are often the only "accessible" buildings in a community, providing barrier-free access to the elderly and others with mobility issues. Schools are generally designed or retrofitted to accommodate persons with disabilities.

As well, research indicates that one of the reasons for the declining participation at elections is the fear of the unknown: the concern that a lack of knowledge of the election process will have one stand out for want of familiarity with the procedures at a poll. Locating polls in schools provides an additional opportunity to discuss elections and voting in context.

However, there are issues and legitimate concerns related to allowing access to schools in session. The challenge is to address the issues and concerns and identify those schools that might be made available as polling locations.

In our election-readiness preparations, the returning officers made a preliminary list of schools for joint evaluation with School Board staff and principals as directed under the protocol.

As Department of Education Deputy Minister Carole Olsen indicated when the agreement was finalized, "this is the first time that an agreement between school boards and an election management body has formally set out parameters under which schools will be used as polling locations."

Returning Officers Inauguration



Appointed by the Chief Electoral Officer for a 10-year period, provincial returning officers administer elections in an electoral district. The work is varied, challenging, and rewarding. It calls for broad management experience and strong planning skills, human resource management and training, contract negotiation, public relations, time management, and organization skills.

The returning officer must be both competent and efficient to complete all the tasks of an election within a specified time period.

As the person responsible for ensuring the integrity and honesty of the electoral process within an electoral district, a returning officer must also clearly demonstrate certain personal qualities: sound judgment, patience, tact, and discretion. The work is by nature impartial and non-partisan, and returning officers must conduct all business accordingly.

Changes to the *Nova Scotia Elections Act* introduced last year led to these appointments being made independent of government for the first time.

The amendments to the *House of Assembly Act* and the delineation of the new electoral boundaries triggered a merit-based competition and the subsequent appointment of 51 returning officers.

Elections Nova Scotia conducted extensive operational training of the new returning officers and their election clerks in the months since their appointments.

The first formal inauguration of returning officers under the new *Elections Act* was held at Province House on January 23, 2013.

The certificates of appointment were presented by his Honour Brigadier-General The Honourable J.J. Grant, Lieutenant-Governor of Nova Scotia and the oath of office was administered by Rick Temporale, Chief Electoral Officer.

New Assistant Chief Electoral Officer



Peter C. Gzowski has been involved with provincial elections since 2001, first at Elections Ontario and for four and half years in Victoria with Elections BC, where he was the director of corporate planning and event lead prior to joining Elections Nova Scotia.

His experience includes responsibilities for the provincial voters' lists and boundaries, three provincial General Elections, numerous by-elections, recall attempts, and a provincial mail-in referendum.



Nova Scotia Election Commission

The Election Commission is established under Section 356 of the *Elections Act* to advise the chief electoral officer. The Commission meets regularly and makes recommendations which, in the opinion of the Commission, would improve the election process or the administration of the *Elections Act*.

The members of the Election Commission are two persons appointed by

each of the leaders of a registered party as defined in the *House of Assembly Act*, for terms of two years each unless otherwise specified, and the chair, appointed by Order in Council. The current members are: Michael Coyle, (Chair); Susan E. Hayes and Chris MacInnes, representatives of the Nova Scotia Liberal Party; Susan Dodd and Don Fraser, representatives of the Nova Scotia New Democratic Party; and Jeff Hunt and

Cameron MacKeen, representatives of the Progressive Conservative Association of Nova Scotia.

During the year under review, the Chief Electoral Officer consulted with the Election Commission on a number of topics including the recommendation for legislative change discussed elsewhere in this report and the Position Paper on Internet voting (Appendix I).

2012 Conference of Canadian Election Officials



The Conference of Canadian Election Officials (CCEO), the association of chief electoral officers in Canada, met in Halifax, July 22-24, 2012. The delegates discussed a

range of subjects of mutual interest including citizen engagement and the role of election management bodies and the appropriate use of technology in elections. The CCEO Technology

Committee recommended that among the priorities for joint study are on-line registration of electors, on-line training, and physical and data security.

Internet and Telephone Voting in Nova Scotia

Background

Public opinion in support of Internet and telephone voting has been growing. Elections Nova Scotia is frequently asked why Nova Scotia electors cannot vote online or by phone in provincial elections when they've been able to do Internet and telephone banking for years. As well, in recent years, a number of municipalities and school boards in the province have used telephone and web-based voting as an option in their elections.

In October 2012, several municipalities, including the Cape Breton and Halifax Regional Municipalities, used Internet and telephone voting.

At the federal level, Elections Canada had announced its intention to pilot Internet voting in a by-election in 2013 but has since backed-off on the date. At the provincial level, Elections Ontario announced a pilot of both Internet and telephone voting in a future provincial by-election, and Elections British Columbia has appointed an independent five-person panel to study Internet voting at the request of the BC Legislature.

With these developments in mind, the chief electoral officer asked the members of the Election Commission of Nova Scotia² their opinion regarding the advisability of preparing for Internet and telephone voting during provincial elections. After considering the literature available, including a careful

review of Elections BC's Discussion Paper on Internet Voting³, the Commission members developed a unanimous position that it is premature to entertain either Internet based or telephone voting options at this time.

The Commission members point out that it is the Members of the Legislative Assembly (MLAs) in Nova Scotia who must ultimately decide public policy on permitting the use of Internet or telephone voting in a provincial general or by-election. The convenience and accessibility benefits espoused by the proponents of these forms of electronic voting are tempting to the general public, but in the end the decision will depend heavily on the comfort level MLAs have with answers to five important questions posed below.

In the interest of fostering public education and informed debate, the Election Commission members have laid out their thoughts on the present status of answers to these five essential questions.

1) How secure are Internet and telephone-based voting transactions?

Elections BC points out that banks knew from the beginning that online banking would not be fraud proof. They calculated that the money they would save in reduced operating costs would make up for the money they would lose to online banking fraud. They have insurance to reimburse

their clients' financial losses. The problems banks encounter with online banking fraud have been on the increase, which is forcing these institutions to spend substantially more resources on insurance, reimbursements to defrauded customers, and for the development of new security strategies to keep pace with ever-evolving and increasingly sophisticated fraudulent activities.

The outcome of a provincial election affects every citizen in Nova Scotia. Banking transactions, on the other hand, take place between individual clients and their bank; the consequences of a dispute do not directly affect anyone else. The public needs to know that each vote in an election was made by an individual, legitimate, elector; that the secrecy of each ballot was preserved; and that each vote choice recorded was accurately counted exactly as it was cast. The integrity of every election depends on these fundamental components being preserved. The Province's MLAs will need to be satisfied that any service vendor being considered for providing Internet and telephone voting services can demonstrate in advance that their system meets these minimum requirements without question.

2) Can service availability be guaranteed?

If an online or telephone banking service is unavailable, clients can try again at a later time or visit their local branch or any bank or ATM offering Interact. However, elections are delivered according to a legislated calendar that provides extremely limited flexibility. For example, if election day is October 9th, voting cannot be extended under any circumstances to October 10th.

There are several potential reasons that online and telephone voting services

¹ Telephone voting systems have evolved to making use of Voice Over Internet Protocol (VOIP) technology. As a result, the same infrastructure that collects voting choices via a web page interface can allow telephone devices to simply act as a different interface to the same election application.

² The Election Commission of Nova Scotia is a seven-member panel made up of appointees from the three registered parties represented in the Assembly with the chair appointed by Order-in-Council. The Commission regularly provides advice to the Chief Electoral Officer and reports back to the registered parties on topics of interest being considered by Elections Nova Scotia in the administration of the provincial electoral process.

³ <http://www.elections.bc.ca/docs/Internet-Voting-Discussion-Paper.pdf>, August 2011



could lose availability during a critical time period (e.g. denial of service attack, hacking, software bug or hardware malfunction, power or network outage, under-estimated service capacity requirements), and this could mean that electors would lose their chance to vote or even have their vote invalidated.

In the recent municipal elections in Nova Scotia, both Cape Breton Regional Municipality and Halifax Regional Municipality used Internet voting exclusively for advance poll voting, but not on election day. This mitigated the lack of service risk factor by offering electors a final opportunity to vote in the traditional way on election day.

If all other concerns were adequately addressed, MLAs might consider the initial use of Internet or telephone voting as one of several options available within an election but start with making the electronic voting channels accessible only during periods outside of election day.

3) How do you know it is me voting?

Banking transactions are identifiable with a complete audit trail from end to end. The client has an established relationship with the bank, transactions require user authentication through user IDs (unique identification codes) and PINs (unique personal identification numbers), and the client's identity follows the transaction through to its completion.

Democratic voting is different. How a person votes is guaranteed to be private and this fundamental democratic principle of ballot secrecy requires that there is no linkage possible between a ballot and the identity of the person who used it. In an election, an elector's identity is authenticated only to confirm eligibility.

With the exception of the limited use of a mail-in write-in ballot option (used primarily by military electors and out-of-province electors), the current provincial voting procedures ensure a person's privacy by requiring them to vote in person by themselves behind a privacy screen in a supervised environment. That privacy ensures electors cannot be coerced into a voting choice, their vote cannot be bought, and they will not experience any repercussions because of their choice.

Some might argue that secrecy is compromised and coercion is possible when immediate family members accompany an elector when voting. Except for someone acting as a 'friend' to a voter who requests assistance in marking their ballot, and has taken the required secrecy declaration, or a young child of the voter who is permitted for educational purposes, no one is allowed to accompany a voter behind the privacy screen in a traditional provincial polling station.

Experts warn that currently no transaction using the Internet can be guaranteed to be secure. Despite advances in security, there is still the chance a voter's identity and voting choice could be exposed, or that someone could vote with someone else's credentials.

The possibility of collecting family members' PINs and then voting on their behalf increases significantly in the privacy of one's own home. At their very best, lists of electors rarely surpass a 95 percent coverage and accuracy level. Under Internet or telephone voting arrangements, the chance of being caught voting on behalf of someone else is minimal. This could potentially happen through the use of voter information cards and PINs of recently deceased family members, or former residents of a particular

address, or simply by voting for an absent family member with or without their consent.

There is also the possibility of organized fraudulent activities such as collecting Voter Information Cards and mailed PINs left in the lobbies of apartments, condominiums, and student or seniors' residences. Access to information such as electors' birth dates would be difficult, but not an insurmountable obstacle, given the extensive data collected by various private and public entities and the amount of information posted on the Internet. Someone who had access to such data, by whatever means, could vote in volume from a high traffic VPN or telephone system network cluster, and detection would be extremely difficult.

None of the above-described actions would be legal if Internet or telephone voting was used, but all would be difficult to detect. Given that the average number of electors per electoral district in Nova Scotia is about 14,000, even a limited uptake of any of these examples of illegal voting could affect the outcome of a close election.

To the members of the Election Commission, a satisfactory response to this problem of reliable authentication must precede the adoption of any widely-used form of Internet and telephone voting.

4) Is there an audit trail I can follow?

In banking, an audit trail shows exactly how monies are allocated. If fraud is suspected, it can be readily identified through a review of the records because the "before state" (or amount of money originally in the account) is known and provable with documented records. Clients can detect errors themselves by reviewing their regular statements.

In the existing traditional paper based voting system, questionable results can

be resolved in a similar manner. A record exists of how many people voted and identity information (but not how they voted) exists about each person who cast a ballot at an assigned ballot box. That is the “before state.” Ballots can then be physically verified and recounted by a provincial court judge. The number of ballots counted must correspond exactly to the recorded number of people who voted at that polling station.

Perhaps the largest leap of faith with Internet and telephone voting is the fact that there is no “before state” examinable. While an auditor can easily demonstrate that the number of votes cast equals the number of votes counted, there remains considerable debate whether there is a satisfactory and transparent way to compare how many of those votes were actually cast by electors verified as registered and not having voted before, and whether each vote was accurately recorded by the software used.

Provincial legislation requires an automatic judicial recount if the difference between the first and second candidate is six votes or fewer. Where paperless votes were cast, how would a judge review each of the votes cast? Would that judge need to be, or have the assistance of, a forensic computer technician to make an accurate determination?

In Germany a court ruling has declared electronic voting unconstitutional because people without technical expertise and specialized knowledge are unable to scrutinize the process.

5) Can I watch the count?

Banks are private entities and are allowed to use secret processes to protect their online transactions. Secret security processes,

however, are not acceptable measures for those aspects of electoral democracy where credibility is directly tied to transparency.

The traditional method of voting achieves transparency by having the acts of voting and counting take place in controlled physical locations, where observers representing all interested parties can witness the process and ensure that all required procedures are properly followed.

Technology encases the voting and counting process in a “black box,” which reduces transparency and, potentially, public confidence. This can be addressed if the actual software used in Internet or telephone voting is open to public scrutiny by independent and trusted programmers and technical analysts before, during, and after the electoral event. It is our understanding that none of the companies currently offering Internet and telephone voting services are willing to share their proprietary software with the public. While this is understandable for both commercial and security reasons, it is problematic in terms of meeting the widely-accepted democratic principle of procedural transparency in ballot issuance and vote counting procedures.

In addition to the known insecurities, a provincial general election conducted on an Internet platform for web or telephone voting could elicit new levels of unknown threats from hackers seeking to gain a high profile from a successful attack. Consider also that the most serious attacks would likely come from persons or groups motivated to change the outcome without anyone noticing.

With that in mind, the adversaries of an election system would not likely be amateurs

in basements but interested groups and individuals with a significant stake in the outcome of an election.

Conclusion

Those in favour of Internet and telephone voting argue that they provide such improved levels of accessibility that they can increase voter turnout and reach people who would not vote if required to attend a physical voting site. By the very nature of services being offered, improved access to voting for many electors is an acknowledged benefit. Even with the recent successes observed in the municipal elections in Nova Scotia in fall 2012, where a significant percentage of electors voted by phone or on the web, some saw increased voter turnout, but this was not the experience for all municipalities. And, while most would agree that online voting is consistent with our increasingly online society, the basic questions of how to maintain the security, validity, and integrity of our elections has not yet, in our opinion, been satisfactorily answered.

Until credible answers to these questions are available, and until functioning, transparent Internet and telephone voting systems have been demonstrated and proven, extreme caution and prudence is required.

Michael Coyle, Chair

Susan E. Hayes, Representative Nova Scotia Liberal Party

Chris MacInnes, Representative Nova Scotia Liberal Party

Susan Dodd, Representative Nova Scotia

New Democratic Party

Don Fraser, Representative Nova Scotia

New Democratic Party

Jeff Hunt, Representative Progressive Conservative

Association of Nova Scotia

Cameron MacKeen, Representative Progressive Conservative

Association of Nova Scotia



Municipal Returning Officers Forum 2012 Report

On October 20, 2012, municipal and school board elections were held in communities throughout Nova Scotia. These elections take place every four years and are authorized by the Municipal *Elections Act* and the *Education Act* and are supported provincially by Service Nova Scotia and Municipal Relations.

“A good list makes for a good election” is an old adage of election officials around the world. Most municipalities use a List of Electors based on the Register of Electors (the Register) created and maintained by Elections Nova Scotia (ENS) and shared with municipal returning officers under agreement.

During the election, ENS heard about issues municipal returning officers encountered with their Lists of Electors. The scope of the issues included duplicate elector records, deceased electors still on the list and registered electors at an incorrect address. From an election administrator’s perspective, concerns with the accuracy and currency of a List of Electors can bring into question the public’s trust in the electoral process.

For this reason, I invited to meet with ENS officials on November 6, 2012, all municipal returning officers who were responsible for the municipal and school board elections and other stakeholders who have a role in ensuring that the data fields in the Register are comprehensive and accurate or that list related products such as voter information cards are delivered.

Among the stakeholders invited were:

- **Dominique Forest**, Regional Vice President, Canada Post
- **Michelle MacFarlane** Director, Deputy Registry General
Vital Statistics, Service Nova Scotia
- **Larry Li**, Director Partnerships, Elections Canada
- **Juergen Weltner** Manager
Register of Electors, Elections Canada
- **Paul Arsenault**, Registry of Motor Vehicles, Service Nova Scotia
- **Vi Carmichael**, Municipal Elections Officer, Service Nova Scotia
- **David Smith**, NSCAF Coordinator, Service Nova Scotia
- **Ed Light**, NSCAF, Service Nova Scotia

Unfortunately, neither Ms. Forest of Canada Post nor any delegate from Canada Post was able to attend. Mr. Arsenault delegated attendance to Ms. Stefanie Turner, Program Administration Officer, Service Nova Scotia.

The forum was a full day. The morning was spent reviewing the primary issues identified by returning officers. In the afternoon, focus groups discussed possible solutions and best practices required to resolve each of the types of issues for the benefit of future municipal and school board elections.

I would like to thank the returning officers and others who participated at the event who quickly saw our common interests in addressing the issues and improving the process and the Register of Electors on which we depend.

Lastly, it was my commitment to those in attendance that ENS would catalogue the issues that were discussed and capture the avenues to solutions contributed by the participants. It was also my commitment to prepare a frank and open synopsis of the various causes of the problems they experienced, a plan, in the form of recommendations for future improvements to the lists they receive for electoral purposes, and a commitment to implement as much of that plan as possible in the years leading up to the next municipal elections in October, 2016.

The forum and subsequent analysis of issues has highlighted the importance of the methods and data used to maintain the Register of Electors. The forum has led me to recommend improvements in other government bodies, particularly the Department of Motor Vehicles. Because of the impact to the Registry of Electors, ENS will work to prioritize these efforts.

Richard Temporale
Chief Electoral Officer
Province of Nova Scotia

Why have a List of Electors?

Before delving into each of the types of problems, it would be useful to provide some background and answer some questions about elector registration. The fundamental purpose of an elector registration system is to ensure that those that are entitled to vote receive a ballot and that they only vote once.

The List of Electors and the elector registration process serves to maintain the public's trust in the integrity of the voting process. It prevents people who are not entitled to vote from voting, ensures that electors only vote once, and contributes to the overall validity of the election process.

The List of Electors is built by compiling the names and addresses of people who attest to their voter eligibility. The list is prepared in advance of the election and is used at the voting station to screen prospective electors.

In Canada, there are two basic methods used to prepare the List of Electors. The historical method is to build the list through enumeration. The second method is to develop and maintain a continuous or permanent register of electors from which the List of Electors is drawn for each electoral event.

What's an Enumeration?

Since 1917 and until very recently, electors in Canada were registered for elections through enumeration. Enumerators went door-to-door to establish a resident's eligibility, collect the necessary elector information and

¹ Several jurisdictions, such as Nova Scotia and Alberta, have also permitted election administrators to collect and store within their registers, information regarding provisional or prospective voters – those below the age of 18 years – for inclusion on voters' lists when they reach the age of majority.

compile a list of those entitled to vote. This was usually accomplished within a 10 day to two-week period post-Writ, i.e. after the election had been called.

Part of the reason for the tradition of post-Writ enumeration is that, until very recently, the exact date of a federal, provincial or territorial election was unknown.

Most jurisdictions now have fixed date elections; Nova Scotia does not. Although enumeration has been found to score high on the currency of the data collected, creating a List of Electors through enumeration in the 21st century does present a number of significant challenges. To name a few, the costs of enumerators' wages, the lack of willingness to answer the door or provide personal information to enumerators, the risk of loss of private information, the personal security of

enumerators, and the quality of the List of Electors gathered through enumeration are all serious issues.

In Canada, there are still some jurisdictions who, by law, must enumerate; these jurisdictions are among the last western democracies where lists of electors are prepared afresh, on a systematic basis, and close to the time of voting.

How is the Register of Electors maintained?

Nova Scotia's permanent register of electors is a regularly updated database of eligible electors.¹ The Register was established in 2005 after a final province-wide enumeration. The Register contains information that would normally be collected through door-to-door enumeration (name, address, mailing address, date of birth) and some additional

Table 1: Sources of information for Elections Nova Scotia Register of Electors

Source	Type of information updates
NS RMV	Updated civic address and mailing address for electors already on Register (no new electors from this source). New apartment /unit addresses in buildings
NS Vital Stats Electors	Deceased electors removed from the Register from this source Revision information provided during an election either as a result of misinformation on a Voter Information Card or updates provided when voting. Between elections updates through direct contact most often initiated by the elector
Municipalities	After a municipal election, updated information of electors and their addresses is passed back to ENS by the municipality.
Returning Officers	Special projects to validate elector and address information between elections and through targeted enumeration during an election
Service Nova Scotia and Municipal Relations	NS Civic Address File (NSCAF) is the NS government civic address standard and provides new and updated addresses
Canada Post	Returned Voter Information Cards during an election
Elections Canada	New electors, elector moves, removal of electors who have left the province or have died outside the province
Dept of Health	Reference to validate status and information of elector (not used yet)



information for linking records from the public sector data sources.

When a Writ of Election is issued, the List of Electors for the election is created from the Register. Because the List of Electors can be corrected up to a set date before election day, it is commonly referred to as a continuous list. The Register is regularly maintained and updated from reliable public sector data sources such as Service Nova Scotia and Municipal Relations' Registry of Motor Vehicles.

Once captured, a permanent list requires minimal efforts from the individual hence forward. Individual elector records are updated from various official sources, such as the Nova Scotia's Vital Statistics records, Registry of Motor Vehicles, Elections Canada's National Register of Electors, change of address information from Canada

Post, etc. The updating of elector records involves record linking from these agencies to capture address changes, age eligibility, deaths, name changes, etc. The authority for the Chief Electoral Officer to request this information and the authority and requirement for external sources to provide it is included in the *Elections Act* which authorizes the establishment of a permanent register of electors.

The use of multiple data sources to update a register presents the challenge of receiving, processing and matching different data regarding the same individual with possible incomplete or incorrect information. The lag between the date a change is made to the source data and the date the Register receives the new data may present discrepancies difficult to resolve. This lag in capturing the change is often

compounded by the delay in reporting the change by the individual. Data differences can be the result of different business requirements and different information collected by the organization that is maintaining the data from those of the Register administrator. In order to address these challenges, a significant effort is required to align the data sources to the Register, to prevent out-of-date information on electors from being incorporated, and to ensure that the residential addresses and mailing addresses meet ENS standards.

In addition to this updating that goes on continuously between elections, the information in the List of Electors is updated at election time through a more limited enumeration process (targeted enumeration) in areas known to have a high level of occupancy turnover and areas undergoing residential growth or transition.

Over time, the currency of a permanent register of electors can be maintained, provided good data sources are available, and used to track changes in a given elector's status and residency.

Elections Nova Scotia regularly exchanges Register of Elector information with Elections Canada. This helps to improve the quality of electors lists used by Elections Canada within the province for federal elections and, in turn, improves the quality of the ENS Register for provincial elections.

Table 2: Elections Canada's National Register of Voters

Source	Type of information updates
Citizenship and Immigration Canada	For new citizens who tick the "Yes" box on their citizenship application form, agreeing to share their name, gender, date of birth and address to update the Register
National Defence	For Canadian Forces Regular Force members who have completed a Statement of Ordinary Residence form
Provincial and territorial driver's license agencies	Updated civic address and mailing address for electors already on Register (no new electors added from this source) Inter-provincial address changes. New apartment /unit addresses in buildings
Provincial and territorial vital statistics agencies	Deceased electors
Provincial electoral agencies with permanent electors lists	Electors lists from recent elections in other Canadian jurisdictions Elector updates similar to the Nova Scotia updates
Electors	Information supplied to Elections Canada by electors when they register to vote or update their registration during and between elections
Canada Revenue Agency	For people who tick the "Yes" boxes in the Elections Canada section of their federal income tax form, which asks if they have Canadian citizenship and agree to share their name, date of birth and address to update the Register

How accurate and current is the information in the Registry?

The quality of Register of Electors is measured through three different parameters: accuracy, coverage, and currency. If an elector's record in the Register correctly holds an elector's name, address and date of birth, then it is said to be accurate. Accuracy problems can arise, for example, through errors in data entry, and when electors err completing elector registration forms.

Coverage is the measure of the number of eligible electors that are included on the Register. Currency is the measure of the number of electors who are at the correct address on the Register. The currency decreases when an elector moves and the Register is not updated.

Elections Canada reports the quality of the National Register of Electors as of November 2011 at 93% of all eligible electors were included in the Register, with 86% of this group at their current address. Elections Canada's published target levels for coverage and currency are 92% and 80%, respectively.

The largest gap in coverage is in the 18 to 24 year old age demographic. Although there are limited opportunities for these eligible electors to be added to the Register, once an elector is registered, usually their address can be regularly maintained through one of the data sources discussed above.

Municipal Electors Lists

Registers of Electors compiled and maintained at the national and provincial levels are commonly used for other electoral events. ENS provides an extract of the register for local government elections to those municipalities who request it and thus

saves them the cost and effort of building an electors' list and maintaining it over time.

This practice is supported in the *Municipal Elections Act*. The *Act* states:

30 (1) By the fifteenth day of April in a regular election year, the council may, by resolution, provide that the returning officer

- conduct an enumeration;
- use the lists of electors used in the most recent federal or provincial election, or in an election held pursuant to this *Act*;
- or
- use any permanent register of electors established and maintained for use in a federal or provincial election.

While both provincial and municipal electors must be at least 18 years of age and be Canadian citizens in order to vote, there is a difference in the residency qualifications between the *Municipal Elections Act* and the *Elections Act*. Section 38 of the latter states:

(c) has resided in the Province for six months immediately preceding the date of the writ.

The *Municipal Elections Act* s. 14, states:

(c) has been ordinarily resident in the municipality or in an area annexed to the municipality for a period of three months immediately preceding ordinary polling day and continues to so reside.

The limitations in the *Elections Act* are greater than those in the *Municipal Elections Act*. It is this difference that causes the issues discussed in the sections to follow. As an example, a Nova Scotia elector in the

Register and on a municipal list signifies that he or she has been resident in the province for more than 6 months but not necessarily at the current address or even the same municipality.

Primary List Related Issues Reported in Municipal Elections 2012

During the morning session of the Municipal Forum on November 6th, the participants confirmed that the municipal returning officers experienced elector list related issues during the 2012 elections that can be grouped under six primary types:

- Electors on the list with an incorrect civic or mailing address
- Eligible electors who were not on the list
- Deceased people on the list
- People on the list who should not have been
- Duplicate elector records
- Incorrect elector information

Other issues mentioned by returning officers were consequences of these primary issues. For example, some municipalities, notably the Halifax Regional Municipality, had an inordinately high number of pieces of mail returned that was addressed using the List of Electors provided by ENS. This resulted in both an administrative and cost burden to the City.

Each of the six types of issues will be discussed in detail outlining their causes, some of which can be traced to the same source, the potential solutions identified by forum attendees and the recommended course of action proposed by the Chief Electoral Officer.



Table 3: Elector Moves Captured from May - August 2012

County	Total Changes of Civic Address in County	Number of Registered Electors in County	% Moves
Annapolis	174	16,339	1.1%
Antigonish	125	14,979	0.8%
Cape Breton (CBRM)	1,095	84,048	1.3%
Colchester	721	38,947	1.9%
Cumberland	267	23,985	1.1%
Digby	90	14,023	0.6%
Guysborough	53	6,714	0.8%
Halifax (HRM)	6,610	299,202	2.2%
Hants	504	32,861	1.5%
Inverness	114	14,000	0.8%
Kings	833	47,061	1.8%
Lunenburg	549	37,559	1.5%
Pictou	327	35,094	0.9%
Queens	53	8,649	0.6%
Richmond	31	7,507	0.4%
Shelburne	41	11,299	0.4%
Victoria	27	5,476	0.5%
Totals	11,614	697,743	1.7%

Note: These figures are reported by county and not by municipal unit. In the case of HRM and CBEM, the county equated to the municipality.

Electors on the list with an incorrect civic or mailing address

Background

There were a number of municipal returning officers and electors who reported that electors were either not on the List of Electors at either the correct civic address or the correct mailing address or both.

Causes

There are a number of causes that may lead to electors having incorrect address information.

First, the addresses from all data source providers undergo rigorous review and corrections. However, even with these efforts, not all addresses can be mapped to the ENS address database and “geocoded”. ENS exclusively uses the addressing data available from NSCAF. If an address update cannot be matched to an existing geocoded address, then that elector change of address

will not be included. In any given year, our experience has been about 24,000 addressing updates offered from various sources for existing electors on the Register fail this primary test and consequently cannot be used.

Second, ENS believes that it does not have access to about 6,000 electors’ address changes per year through any of the data sources available. A portion of the registered electors are not linked to any data source. ENS has no way of knowing when one of these electors change their address.

Third, there are significant time lags from the date the list is provided to municipalities, and municipal election day. Lists were requested in April, provided on May 18 to most of the provinces’ municipalities, and the election was not held until October. There was a five month gap between receiving the lists and election day. Table 3 above lists the number of changes applied

to the Registry of Electors based on information from the Registry of Motor Vehicles between May 18th and mid-August, 2012. Without making provision for updating the list from ENS data sources between the time the list is provided by ENS and mid-August, these moves demonstrate the number of undeliverable pieces of mail per mailing and the “errors” that municipal returning officers caused by accepting a List of Electors in May and not accepting administrative updates through the election period. HRM updated addresses of about 11,000 electors on election day. Based on the number of address changes available from Registry of Motor Vehicles, about half of these electors may have updated through ENS and Registry of Motor Vehicles.

Fourth, a portion of the addresses provided by the Registry of Motor Vehicles for Nova Scotia are not valid. ENS depends on the Registry of Motor Vehicles and Elections Canada for “Change of Address” information for electors on its Register. The online system used by the Registry of Motor Vehicles is a key data source for change of address information. Each month, ENS receives mail and/or civic change of address information for 8,000 individuals from the Registry of Motor Vehicles.

Registered electors identified within this data will only be “moved” if we can confirm that the civic address is an accurate NSCAF address. ENS generally matches 75% (6000) of those individuals to electors on the Register; however, a third of those electors’ address changes (2000 electors) do not match ENS’s civic address database



or the NSCAF address database and consequently, cannot have their change of address applied to the Register. In the table above, roughly 4,000 elector moves were captured per month totaling 11,614 province-wide over the three month period.

The Registry of Motor Vehicles online tool is driven by data entered by the online user. It appears that in at least a third of the cases, the user enters civic address information that cannot be matched to a bona fide NSCAF address and the online tool allows the user to submit this unverified civic address.

Sixth, the quality of mailing addresses suffers due to manual data entry, difficulty in parsing non-civic elements of the mailing address and misunderstanding of Canada Post's mailing address standards. When a rural mailing address is entered by an elector, or added to the Register based on a form completed by an elector, the mailing address may not align with the Canada Post standards. Rural mailing address examples include rural route (RR) information, superbox or PO box information.

Mailing addresses are not always provided, or if provided, may not have all the necessary elements to be delivered. ENS uses StreetSweeper, a software tool approved by Canada Post, to validate and correct mailing addresses. StreetSweeper is used to enhance deliverability, measure the quality against the Canada Post standards and obtain a discount in postage rates if the quality exceeds 95%, i.e., that 95% of the addresses meet the standard. In addition, not all stakeholders understand the Canada Post standards. For example, Canada Post may use their version of a postal community that is not the same as the official municipal name. In the past, this has led to reviews

of mailing addresses to make changes that reduced the quality and hence, the deliverability of the Voter Information Cards in those areas.

Seventh, there are time lags between the time when an elector moves and when that information is applied to the Register and then provided to a municipality. For example, the delay from when an elector reports his or her new address to the Registry of Motor Vehicles, to the time ENS receives and applies the Registry of Motor Vehicles' update to its Register of Electors may be up to three months. This factor alone can cause up to 25,000 electors not being added to various municipal lists of electors province-wide over the municipal election period.

Lastly, electors tend to change their own address information only, regardless of whether the spouse and other household members also require a change to their addressing. This can lead to members of the same household residing at different addresses. ENS cannot arbitrarily assume other members of the household have moved as well.

Eligible electors who were not on the list

Background

Municipal Returning Officers were concerned that a significant number of eligible electors were not on the election day List of Electors for their municipality.

Causes

New electors can only be registered by ENS and Elections Canada through an elector-initiated action. That is, the elector must provide his or her consent to be registered through an administrative process (e.g.

check-off on tax forms filed with CRA) or register directly, for example in conjunction with voting or by contacting ENS or Elections Canada. As these are opt-in processes, not all electors choose to provide this information.

When ENS receives elector information from Elections Canada, electors are added to the register only where the address provided can be matched to the ENS address base. With the current differences in the two address databases (ENS exclusively relies on NSCAF data, while Elections Canada does not), some new electors from Elections Canada will not be added to the provincial Register.

ENS also holds about 54,000 legacy addresses across the province that cannot be accurately located on a map (geocoded) in the municipality. In the same way that electors at these non-geocoded addresses are excluded from lists of electors generated for provincial elections, they were excluded from being on all municipal lists of electors.

People on the list who should not have been

Background

Municipal returning officers were concerned with the number of electors that were on the List of Electors that shouldn't have been. As an example, a number of returning officers mentioned the voter information cards that were returned "moved". Some received calls from people who received voter information cards addressed to them despite the fact they were ineligible to vote (not a Canadian citizen).

Causes

As above, there are time lags between the time an elector reports to one of the



commonly used data sources that they have moved and when that information is included in the Register. As an example, an elector who moved sometime in March 2012 and changed his licence over in April may not have been captured in the April transfer of data from the Register of Motor Vehicles to ENS. If that were the case, the elector's new address would not have been included in the List of Electors cut for the municipal election in May.

Consequently, when this elector showed up to vote in October, six to seven months after moving, they would not be found on the list. This lag would also be responsible for leaving the elector on the list in his or her former municipality at an address that is no longer valid.

ENS depends mainly on Elections Canada for identifying electors who moved out of Nova Scotia. Matching those electors and marking them as out-of-province will improve when synchronization with Elections Canada's data has been further refined.

In general, there is less reason to be concerned about ineligible electors, i.e., non-Canadian citizens on the list. In the 2012 municipal elections there were 8 reported cases of non-citizens on the list. In each case, the individual had confirmed their eligibility at the time of registration. These individuals were removed from the Nova Scotia Register of Electors and Elections Canada has been informed of their names.

Duplicate elector records

Background

Municipal returning officers reported that it appeared that there was more than one elector record representing an individual elector on their List of Electors.

The returning officer for Halifax Regional Municipality identified 680 potential duplicate electors on the HRM Electors List.

Causes

One of the major challenges ENS faces with the maintenance of the Register is to be able to match elector data received from various sources that have slight discrepancies in the individuals' data. ENS has developed processes and systems to automate the data matching, but this remains an inexact science. This challenge is compounded with the existence of legacy elector records that had been added to the Register between 2003 and 2005 with data entry errors in the name or date of birth of some electors who registered at that time. There are also electors who were registered at the wrong address.

With respect to the 680 files identified by HRM staff, ENS has manually reviewed each elector record pairs and confirmed about 80% of these files are duplicates. Among the remaining 20 per cent are pairs who are in fact unique electors, i.e., twins, parent-child pairs, or non-related unique individuals. The labour intensive exercise of conducting a manual review demonstrates the difficulty electoral bodies face in creating automated processes for identifying duplicates and matching electors from different sources. It also demonstrates the challenges we have in identifying and agreeing on duplicate records.

To reduce the risk of duplicating and correctly updating electors' information, ENS continually synchronizes the records in the provincial Register with those in the National Register. ENS matches the Register to the National Register by matching electors by name and date

of birth. The ability to compare files by Master License number for all drivers in the Province is critical to successfully identifying and removing duplicate electors from the provincial register and maintaining the Register. To this end, ENS should have access to these Master License numbers for every driver in the province.

Furthermore, Elections Canada should be authorized to share with Elections Nova Scotia the province of Nova Scotia master license number it has on its elector's record. Elections Canada currently has the master license numbers for each elector with a driver's license in Nova Scotia but has not received permission from the Registry of Motor Vehicles to share this data with ENS. Both these outstanding requests are currently under consideration by Service Nova Scotia and Municipal Relations' Registry of Motor Vehicles. These two changes would significantly improve the possibility of matching electors' records and the possibility of correctly updating elector record information in both Registers.

Incorrect elector information

Background

Municipal returning officers expressed concern that there were electors who registered with incorrect information, in particular a significant number of women who were registered under their maiden names after they had legally changed their name. Many of these electors were on the register under both their maiden name and their married name.

Causes

Currently, ENS cannot determine if someone changes their name from any of the sources data at its disposal. If these electors have a driver's license, they are required to inform the Registry of Motor Vehicles when they change their name. The Registry of Motor Vehicles provides a new driver's license number and invalidates the old number. ENS currently cannot, with any degree of certainty, determine whether these two Registry of Motor Vehicles transactions apply to one elector and consequently, leaves the elector on the Register under the original name. The municipal returning officers could not identify a readily available way to resolve this problem.

Deceased on the Electors List

Background

Municipal returning officers expressed concern that there were electors who were deceased on the List of Electors.

Causes

The deceased electors who remained on municipal Lists of Electors can be attributed to three major reasons:

- ENS receives about 700 names of the deceased on a monthly basis. ENS records indicate that about 90% are successfully matched and marked as deceased on the Register each month. Those that are electors among the remaining 10 per cent will still appear on the municipal Lists of Electors. In addition to this, over the 5 month period between providing list data to municipalities (between May and election day in October), about 3,800 registered electors who died were processed and removed from the Register. Municipal

returning officers did not receive updates on register changes after receiving their initial list data in May.

- ENS first built the Register based on the 2005 provincial enumeration. Subsequently, ENS did not start to receive deceased data from Vital Statistics and Elections Canada until 2007. The names of electors who died during this two-year period were unknown and therefore, could not be removed from the Register at that time.
- ENS became aware of this issue in 2011 and approached the Department of Health to obtain another source of this data. The Department of Health recently provided this information. Consequently, 90 per cent of the electors who died between 2003 and 2007 were successfully removed from the Register in December, 2012.

Recommendations

Many of the following recommendations are credited to the returning officers and stakeholders who participated in the Municipal Returning Officer Forum held on November 6, 2012. In addition, Elections Nova Scotia has included recommendations that logically extend from the forum discussions.

1. As the authority on maintaining the Register of Electors and producing Lists of Electors for provincial, municipal and school board elections in Nova Scotia, Elections Nova Scotia should in future, provide "live lists" via access to ENS servers from the date list data are turned over to a predetermined date after election day rather than supplying municipalities disks containing static lists of electors.

2. During the municipal election period Elections Nova Scotia should:

- Extend the functionality of the provincial Election Management System (EMS) to support elector registration processes
- Train municipal returning officers on registration processes and forms prior to providing access to live lists in the spring of an election year
- Develop elector registration forms for the municipal returning officers to use during the election period
- Provide continual elector registration support to municipal returning officers during the election period

3. Elections Nova Scotia should continue to undertake significant cleansing of the register to eliminate legacy problems. Where List of Electors issues exist, ENS is responsible for contacting the elector, identifying the source of error, and correcting the register maintenance systems.

4. At all times, municipalities should work in conjunction with Elections Nova Scotia to support municipal Lists of Electors and to assist in the maintenance of the provincial Register of Electors. Some of the areas to work on include:

- When reviewing their data, municipalities should provide feedback to Elections Nova Scotia in preliminary period through the tools and processes developed by Elections Nova Scotia.
- Municipalities should support the quality of the address information in the Register when reviewing municipal addresses
- Municipalities should use standard registration forms and processes, including elector registration forms, authorization to view and/or access the electors list.



- Municipalities should provide the services for electors to review and update their elector information at their facilities using the tools provided by Elections Nova Scotia.

5. After any local election municipalities should use Elections Nova Scotia tools to update all elector registration transactions within a mutually agreed upon period of time, including corrections to the poll record and new elector registrations.

6. Municipal councils should consider eliminating costly enumeration where it is still employed.

7. The Minister responsible for Service Nova Scotia and Municipal Relations should consider making the following changes to the *Municipal Elections Act*:

- Regardless of whether a municipal council decides to conduct a full enumeration, all municipalities should be given access to an extract of the provincial register of electors once they agree in writing with ENS terms and conditions for the use of that list.
- Municipalities should be afforded the power to conduct targeted enumeration. Targeted enumeration should be conducted as close to the municipal election date as practical, i.e., in September before the amended list of electors is produced. Target enumeration should be done to enhance the voters list provided by Elections Nova Scotia, i.e., in areas of new developments or in situations where there has been a significant population shift.

8. Further, when reviewing the *Municipal Elections Act*, the Minister should consider updating election procedures and milestones that mirror those enacted in the province's new *Elections Act* including:

- Harmonizing the qualifications of electors in both acts (residency requirements) to reflect that electors in provincial elections require 6 months residency in the province and adding a further qualification for electors in municipal elections that they also have at least three months residency in the municipality in which they are voting.
- Extending the revision period in the *Municipal Elections Act* to allow electors to update their registration information from the end of August to the day before candidate nominations are filed.
- Timing the release of Lists of Electors to nominated candidates to ensure the highest possible list quality for the Internet voting period.
- Removing the section of the *Act* regarding the certificate of eligibility. Electors can register in conjunction with voting.

9. The Registry of Motor Vehicles should:

- Give high priority to identifying inaccuracies and discrepancies that exist on record for drivers' residential and mailing addresses. Correcting existing information for individuals, who in the majority of cases are also qualified electors, and preventing the collection of erroneous information in the future, is extremely important to Elections Nova Scotia and Elections Canada, both of which depend on such data to relocate the elector to the correct address and preserve the currency of the provincial and national registers

of electors.

- Provide all data fields to Elections Nova Scotia including the master license number, name, civic and mailing address and date of birth of all license holders.

- *Note: The Registry currently provides the master license number to both Elections Nova Scotia and Elections Canada under separate agreements. Unfortunately, Elections Canada's agreement with the Registry does not permit it to share this same data with Elections Nova Scotia when providing it with periodic updates to the National Register of Electors. The absence of this identifier exacerbates the problem of removing duplicate electors from both Registers. The Registry of Motor Vehicles has discussed the issues with ENS on several occasions. The Registry of Motor Vehicles is currently pursuing an agreement with Elections Canada which will enable Elections Nova Scotia to access address changes using the master number as the key. There is a draft agreement under review with the goal of completion within 90 days.*

- Provide authorization to Elections Canada to share the master license number they receive with Elections Nova Scotia.

- Provide a full copy of the drivers' license database to Elections Nova Scotia on an annual basis.

- Incorporate a change of name flag in its data base for individuals who adopt a new name.

- Upgrade the change of address requirements in the Registry's software to ensure that change of address functionality requires:

- i. both the civic address and the mailing address to be queried when an individual moves;



- ii. query the individual making the change about the status of other drivers at the former address; and,
- iii. encourage other members of the household to update their address if applicable.

- Use NSCAF data exclusively to validate addresses through all change of address processes.

- *Note: The Registry of Motor Vehicles is part of Service Nova Scotia, the department responsible for maintaining the provincial standard address database, NSCAF.*

Embracing wide acceptance and use of NSCAF, will reduce the number of errors in all address information shared among municipal, provincial and federal departments and agencies including police forces.

In 2012-13 Service Nova Scotia declared NSCAF as a corporate standard through the CIO standards process for key fields, when systems are being updated/ or acquired. The next step is to declare NSCAF as the single source for location based (civic address) data, which would mean any provincial government database that uses civic address would have to use NSCAF as the source/or at a minimum for validation.

Service Nova Scotia's own systems that utilize location address (RMV, business registry, land, and many more) should be validating any location based data against the official NSCAF data and ideally doing this in real time; this would eliminate work, errors and confusion, as well as enable improved services. Elections Nova Scotia and Service Nova Scotia recognizes that this requires money, resources and time and would enhance the quality of services provided.

Service Nova Scotia believes that they need to have a corporate data strategy for use of location based data, within SNSMR, and

ideally for the province. Having the NSCAF declared officially as the single source/ only source, will require this to happen and the Geomatics Strategy will assist in raising the awareness of the importance of these issues, across government.

10. Elections Canada should use NSCAF exclusively to validate all Nova Scotia addresses currently in the National Register and to verify addresses submitted to them by electors. This would reduce the number of errors in the agency's data.

11. Elections Nova Scotia should work with representatives of municipal returning officers to design a standardized Voter Information Card for municipal elections. Canada Post works most effectively if they can communicate a clear message to their Post Masters on the province-wide products that they are responsible for delivering. If the municipalities could agree on a standard looking product, and include instructions that it be delivered to the specified elector or occupant, the instructions province-wide for Canada Post to its Post Masters would be simpler and the success rate for the delivery may benefit.

12. Elections Nova Scotia should assist municipal returning officers during a municipal election year in identifying and resolving undeliverable mail issues with Canada Post.

13. With respect to providing list-related services to electors on-line:

- Elections Nova Scotia should work with Halifax and Cape Breton Regional Municipalities to:

- i. develop a web facility to allow existing or new electors to verify and update their address information or register on-line or by phone if they can provide a verifiable identification that meets the privacy standards of the Nova Scotia Freedom of Information and Protection of Privacy Review Office;

Note: Electors without verifiable identification can register in person with identification authorized or by swearing a declaration as per the Elections Act.

- ii. provide access to this facility to all Nova Scotia municipalities for municipal and school board elections in tandem with the "live list" concept; and,

- iii. encourage electors and potential electors to use the web facility to register, update, or confirm their elector information.

- *Note: On-line elector registration modules have proven successful at allowing electors to determine and update their registration status for municipal elections locally in both Halifax and Cape Breton Regional Municipalities. On-line systems have also been in place in BC (since 2005), Alberta (2009) and, most recently, federally (2012).*

14. Similar to the media campaign used around provincial general elections, Elections Nova Scotia should offer a province-wide public education campaign during the municipal election year to encourage electors to take responsibility for ensuring they are registered and if so, that they are on the Register accurately.



- *Note: Mailing key electronic voting information to eligible electors is a key requirement for municipal electronic voting. Part of the information program leading up to municipal elections should alert electors to their responsibility to ensure that they are on the electors list before any electronic voting information is put in the mail.*

Next Steps

Elections Nova Scotia is committed to improving the Register of Electors and the Lists of Electors used during municipal elections. There is much that can be done and some of that work has begun internally.

Elections Nova Scotia has improved some of the Register maintenance activities to review addresses provided by all sources. We have also examined health records to remove deceased electors from the Register of Electors.

Significant improvements can be made through synchronizing data management efforts with our partners. This will likely require structural changes to existing databases.

To move forward on these recommendations Elections Nova Scotia will:

- Meet with the municipal returning officers and partners to verify their List of Electors requirements through the election period
- Meet with the Deputy Minister of Service Nova Scotia who is responsible for the Registry of Motor Vehicles and NSCAF to determine the viability, costs, and impacts of the changes required to implement the recommendations contained in this report.

- Meet with the NSCAF team to discuss improvements to the quality of the data
- Meet with the various stakeholders to discuss the cooperative development of a report and recommendations for legislative changes to synchronize where required the *Municipal Elections Act* and the *Elections Act*.
- Develop an action plan to prioritize, identify timelines, costs and risks, to implement the recommendations over years leading up to the 2016 municipal elections.

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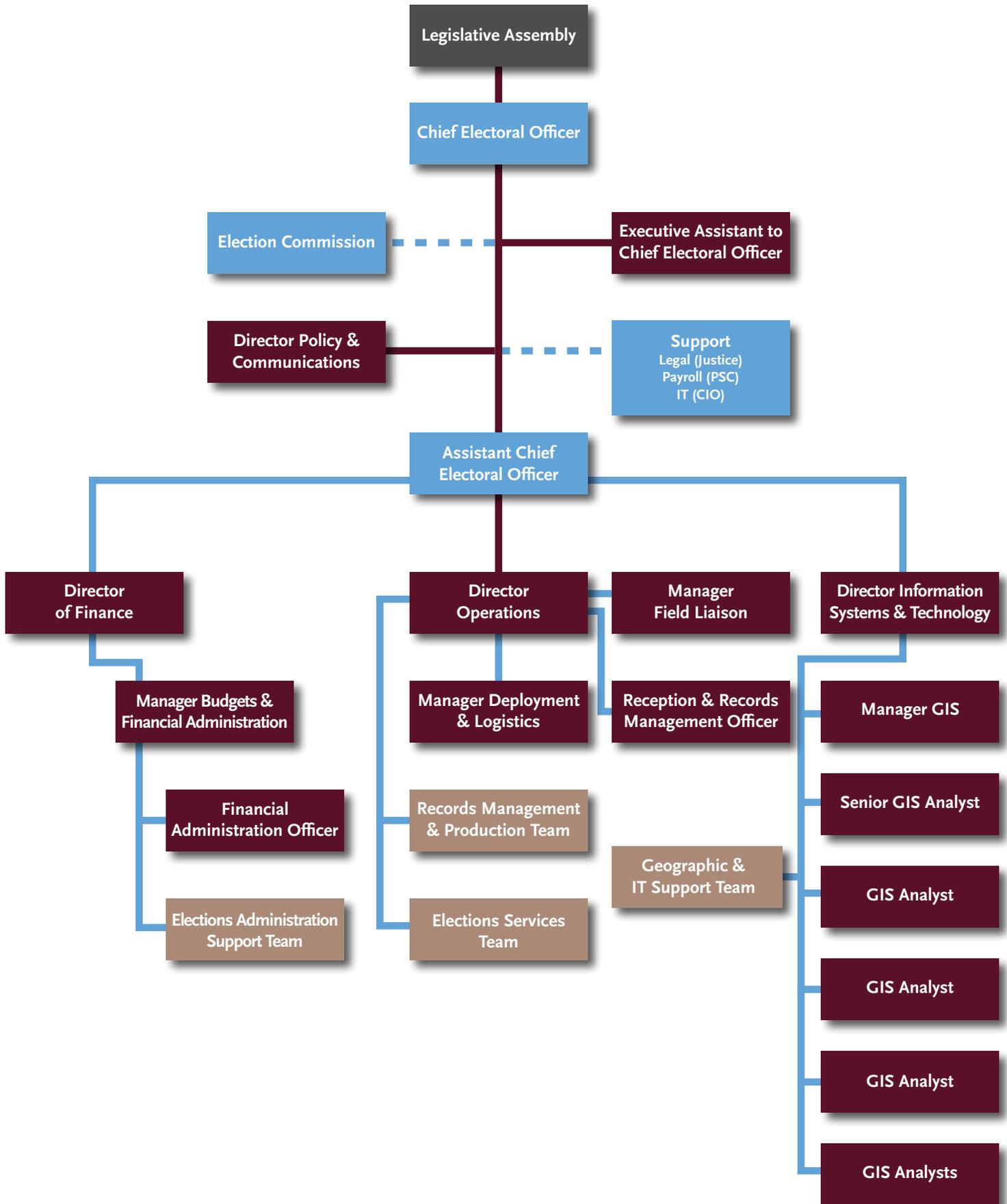
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