Report
Staff Report
The Corporation of the City of Brampton
2020-11-18

Date: 2020-08-31

Subject: **2022 Municipal Election – Voting Technology Model**

Secondary Title: Request to Begin Procurement for Internet Voting and Contract Extension for Vote Tabulation Equipment

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Recommendations:

1. That the report titled: **2022 Municipal Election Technology Model**, to the Committee of Council meeting of November 18, 2020, be received;

2. That Council approve Model 5 for implementation in the 2022 Municipal Election, including:
    a. Extension of contract with existing vendor to lease tabulation equipment to be used on Voting Day; and
    b. Provision of internet voting services for the entire advance voting period, plus the establishment of one advance voting location at City Hall for those electors who desire to vote during the advance voting period, and still wish to vote using a paper ballot;

3. That the Purchasing Agent be authorized to commence the extension of the contract related to vote tabulation equipment and the procurement of the internet voting system, based on Council's approval of Model 5 as described in this report; and

4. That a budget amendment be approved and a new capital budget be established for contracted internet voting services for advance voting and capital lease services for vote tabulation equipment, with funds transferred from the General Rate Stabilization Reserve, pending Budget Committee deliberations:
    a. Paper ballot tabulation: $870,000 ($256,000 in 2021, and $614,000 in 2022)
    b. Internet voting contract service: $800,000 (in 2022).

Overview:

- **The next municipal election for the City of Brampton will be held on Monday, October 24, 2022.**
- **Section 42 of the *Municipal Elections Act, 1996* (MEA) permits municipalities to pass a by-law to authorize the use of alternative voting methods and vote tabulation equipment. Vote tabulation equipment facilitates accurate, efficient and transparent vote tabulation and results reporting.**
- **For the 2018 Municipal Election, the City leased vote tabulation equipment.**
- **A Request for Information (RFI) was issued in February 2020 to gather analysis on vote tabulation equipment and internet voting technology. Responses have been received and analyzed by staff.**
- **On October 20, 2020, the Province announced proposed changes to the MEA through Bill 218, *Supporting Ontario's Recovery and Municipal Elections Act, 2020*, which affects the timing of passing by-laws for alternative voting methods and vote tabulation equipment, and eliminates the ranked ballot voting option.**

Background:

The City of Brampton conducts municipal elections in accordance with the *Municipal Elections Act, 1996* (MEA). The next regular municipal election will take place on October 24, 2022.

Section 42(1) of the MEA permits municipalities to pass a by-law authorizing the use of voting and vote-counting equipment such as voting machines, voting recorders or optical scanning vote tabulators. This section also authorizes the use of alternative voting methods for a municipal election.

<u>Voting Technology in Brampton Municipal Elections</u>

For more than 15 years, the City of Brampton has used optical scan units (vote tabulators) and touch screen units for accurate and efficient vote tabulation and results reporting. The City's supplier of election equipment for the past several elections has been Election Systems and Software (E.S. & S). The City also uses a third party vendor (DataFix) for voters' list management services.

Election Technology Replacement Project for the 2018 Municipal Election

Ahead of the last municipal election in 2018, staff completed an election technology replacement project in order to replace vote tabulation equipment that had reached end of life. Prior to 2018, the City owned its vote tabulation equipment. Staff issued a Request for Information (RFI) to understand what voting technology was available at the time. The results of the RFI were analyzed and Council was presented with various options for voting technology.

Changes to the MEA in 2016 to include provisions for ranked ballot voting were an important consideration when selecting voting technology. Any system chosen by the City must be able to accommodate the possibility of ranked ballot voting in future elections.

The equipment must also continue to meet the City's obligations to candidates, electors and election workers with disabilities under the MEA, the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) and its related regulations. Under the MEA, the Clerk must have regard to the needs of electors and candidates with disabilities, and is required to prepare a plan to identify, remove and prevent barriers to voting, for electors and candidates with disabilities. Accessible voting technology has been used in Brampton's elections to assist electors with disabilities to vote independently.

Staff recommended that vote tabulation equipment be leased for the 2018 election, and that internet voting services be procured for the advance voting period. The advantage of leasing equipment as opposed to purchasing it meant that staff could evaluate new technology offerings for each election, and be able to adapt to alternative methods of voting, should Council decide to implement internet voting or ranked ballot voting in the future.

Council decided not to pursue internet voting for 2018 but voted in favour of leasing vote tabulation equipment. Staff issued a Request for Proposal (RFP), and for the 2018 election, vote tabulators and accessible voting units were leased from E. S. & S, one of two main vendors for vote tabulation and accessible voting equipment who serve Ontario's municipalities.

2018 Technology Experience

During the 2018 Ontario Provincial Election, vote tabulation equipment was used for the first time at Polling Day locations. Election staff participated in the provincial election as a training exercise, and to gain experience with provincial procedures around voting technology. Staff was trained on the use of the Province's vote tabulation equipment (different vendor) and observed the equipment in the voting locations. Comparing the Province's equipment to Brampton's selected equipment, staff felt that Brampton's equipment facilitated a more efficient process at the voting location, with less time required to transfer the ballot through the tabulator, and into the ballot box.

Staff were very satisfied with the vote tabulators and accessible voting units used in the 2018 election. The vote tabulators were efficient, accurate and easy to use, and facilitated the efficient publishing of election results after the close of voting. The accessible voting units enabled electors to vote using a paper ballot, with the assistance of various accessible devices (such as high-contrast viewing, audio ballot, and Sip-N-Puff). The accessible voting units provided electors with disabilities the opportunity to vote independently in the election.

Alternative Voting Methods

There were no alternative methods of voting in place for 2018. In the 2014 Municipal Election, staff piloted the Home Voting Program, where election workers visited electors who were homebound due to injury, illness or disability, to provide them with an opportunity to vote independently in their homes. The program was successful and electors were appreciative of the opportunity to vote. The program was intended to be expanded in 2018, but due to legislative change in the timelines for passing the by-law with respect to alternative voting methods (changed from June 1 in the election year to May 1 in the year before the election), the by-law was not passed and the program could not be implemented.

Current Situation:

Bill 218, *Supporting Ontario's Recovery and Municipal Elections Act, 2020*

On October 20, 2020, the Government of Ontario introduced proposed changes to the *Municipal Elections Act, 1996* (MEA), through Bill 218, *Supporting Ontario's Recovery and Municipal Elections Act, 2020*. Proposed changes to the MEA effectively undo some of the amendments made to the Act in 2016, and include the following:

Removing the Framework for Ranked Ballot Elections (Ontario Regulation 310/16)

The 2016 changes to the MEA included a new framework for ranked ballot elections, and provided municipalities with the option of selecting ranked ballot voting as their voting model, over the traditional First-Past-the-Post (FPTP) model, where the candidate who receives the most votes, is elected. The City of London was the only Ontario municipality (and the first in Canada) to implement ranked ballot voting in the 2018 Ontario municipal elections.

Staff had researched a prepared a report to be presented at Committee with respect to ranked ballot voting. The report provided an overview of ranked ballot voting, and discussed the City of London's experience implementing ranked ballot voting in the 2018 municipal election. The report also outlined the process for implementing ranked ballot voting, along with estimated costs for public awareness and education, and sought direction from Council on whether or not to proceed with ranked ballot voting for the 2022 election.

Due to the changes proposed by Bill 218, the report is no longer being presented to Council at this time. With the passing of the Bill, municipalities will no longer have the option to decide on the format for their elections; all municipalities will conduct elections using the First-Past-the-Post (FPTP) model.

Longer Candidate Nomination Period

Bill 218 changes Nomination Day to provide for a longer candidate nomination period. The table below shows the changes to the nomination period over the last few election cycles:

	2014	**2018**	**2022**
Start of Nominations	January 1 of election year	May 1 of election year	May 1 of election year
Nomination Day (end of nominations)	Second Friday in September	Fourth Friday in July	Second Friday in September
Approximate Length of Nomination Period	8.5 months	3 months	4.5 months

Changing Nomination Day back to the second Friday of September may create some time constraints with ballot preparation and printing ahead of advance voting, however staff will manage the new timelines as part of the overall election project plan.

Extending Deadlines to Pass By-laws and Establish Related Procedures and Forms

Section 42(1) of the MEA permits municipalities to pass a by-law authorizing the use of voting and vote-counting equipment, and to pass a by-law authorizing the use of an alternative voting method.

Bill 218 changes the deadlines for passing by-laws under Section 42(1):

	2014	**2018**	**2022**
Deadline to Pass By-law	June 1 of election year	May 1 in the year before the election	May 1 of election year
Deadline to Establish Procedures and Forms	June 1 of election year	December 31 in the year before the election	June 1 of election year

Changing the timelines for passing by-laws under this section of the MEA will allow more time for staff to research and present options for Council's consideration. However, staff would recommend that the by-laws be passed much earlier than May 1 of the election year, in order to finalize the voting model for the election, so that the necessary planning work can begin, and to allow for any required procurement processes to take place (to be discussed in later in this report).

Extending the deadline to establish procedures and forms related to the voting and vote counting equipment, and any alternative voting methods, is beneficial and allows staff more time to review policies and procedures.

Staff is not currently aware if further changes to the MEA will be announced.

Voting Technology

In preparation for the 2022 Municipal Election, staff followed a similar approach as was completed for the 2018 election, by issuing a RFI for voting technology, including internet voting, in early 2020. Staff was interested to learn about the current offerings for voting technology and internet voting. Staff received four responses and reviewed the technology offerings.

Vote Tabulators and Accessible Voting Units

As part of the procurement process for 2018, there was an option to renew the voting technology contract with the selected vendor for any by-elections between the 2018 and 2022 regular elections, and for the 2022 Municipal Election.

Based on staff's positive experience in 2018 with the selected vote tabulators and accessible voting units, staff recommend exercising the option to extend the contract with the current vendor for the 2022 election.

Staff was particularly satisfied with the efficient processing of ballots through the vote tabulator into the ballot box, and the support provided by the vendor for software set-up, trouble-shooting, election results transmission and field support on voting days.

The updated accessible voting units provided by the vendor created more opportunities for electors with disabilities to be able to mark their ballot independently. An accessible voting unit was available at each advance voting location and at a designated location in each ward on Voting Day in 2018. Through the RFI process, staff is aware of a newer version of accessible voting equipment offered by the vendor and will investigate the enhanced offerings of the accessible equipment, as well as vote tabulators.

Internet Voting

Municipalities that used Internet Voting in 2018

Municipalities across Ontario are increasingly using internet voting in their elections, either exclusively, or in combination with another form of voting. 194 municipalities offered internet voting in 2018, an increase from 97 municipalities in 2014. For example, the Town of Newmarket moved from a paper-based election to internet and telephone voting exclusively in 2018. The City of Markham has been delivering internet voting elections in some form since 2003. In the 2018 Municipal Election, Markham offered paper ballots and internet voting during the advance voting period, and internet voting

only on Voting Day. Markham is considered a leader in the internet voting area, being the first major municipality in Canada to use internet voting.

After the 2018 Municipal Election, a Post-Election Survey was conducted by the Association of Municipal Clerks and Treasurers of Ontario (AMCTO). Responses were received from 263 municipalities. Responses highlighted the use of technology in the 2018 elections:

- 47% of respondents used internet voting during the advance voting period and on Voting Day
- 2% used internet voting during the advance voting period only
- 51% did not use internet voting

In response to whether or not municipalities would use internet voting again, 107 out of 117 respondents stated that they would, while the remaining 10 respondents stated that they might – no respondents stated that they would not recommend using it again.

Advantages of Internet Voting

- Convenience – electors would no longer have to visit a physical voting location to cast their ballot, and could vote at any time during the voting period (typically 24 hours a day, over multiple days). This may appeal to younger voters, who typically vote less than other age groups.
- Accessibility – allows electors who cannot visit a voting location to vote independently, rather than appointing a proxy voter to vote on their behalf. For example, electors with mobility impairments need not leave home to vote; electors with vision impairments can use screen reading technology.
- Promotes social distancing – with the Covid-19 pandemic, municipalities are researching different forms of remote voting. Internet voting would provide an option for those members of the community who do not feel comfortable gathering at a voting location in order to cast their ballot.
- Modernization of democratic processes – internet voting is in line with many other aspects of everyday life that are available online such as online shopping and banking.
- Environment – municipalities who implement internet voting exclusively eliminate the need for printing thousands of paper ballots. Electors and election workers would also not be required to drive to voting locations, resulting in less fuel consumption.
- Cost savings – although there are costs associated with internet voting, municipalities can save money by reducing the number of physical voting locations, which in turn would reduce the number of election workers and voting location supplies.

Drawbacks and Risks

- Although internet voting provides more convenience and accessibility to electors, it has not been proven to increase voter turnout.
- All electors may not have access to a device to allow them to vote remotely
- There is no opportunity to verify elector identification when a person votes remotely
- At a voting location, staff make every attempt to ensure that an elector can vote privately, in secrecy and without the influence of others – this cannot be accomplished in a remote voting environment
- There is no opportunity for candidates or their scrutineers to observe the ballot issuing process
- There is no opportunity for a manual recount process
- The security of the election is the primary concern related to internet voting

Mitigating Security Risks

There are a number of ways to mitigate security risks in an internet voting election:

- Requiring electors to register if they wish to vote via the internet (i.e. 2-step voting process)
- 2-factor authentication – requiring two pieces of unique information in order to access the voting system (e.g. PIN and date of birth)
- Conducting independent security tests of the vendor's systems
- Hiring an independent auditor to oversee the process
- Ensuring that the system meets the industry standards on privacy and security

What Municipalities are doing in 2022

Many municipalities are currently evaluating voting technology, and remote methods of voting (in consideration of the Covid-19 pandemic) for the 2022 Municipal Election. The City of Burlington will be using internet voting for the advance voting period only in 2022, and staff anticipates that the City of Markham will continue with internet voting exclusively for Voting Day.

The Cities of Toronto and Mississauga will not be proceeding with internet voting for the 2022 election, due to security concerns.

Internet Voting in Brampton

Internet voting has not been used in Brampton's municipal elections to date.

Brampton's City Clerk currently serves as the Returning Officer for the Association of Municipalities of Ontario (AMO) Board of Directors Elections. In August 2020, the annual AMO conference was held virtually for the first time, and as a result, the Board of Directors Elections which take place during the conference, were also held virtually through internet and telephone voting. This election was staff's first experience with

internet voting, and proved to be successful. Comments received from voters indicated that the voting process was straightforward, easy and efficient.

Based on this experience, and the general advantages associated with internet voting, staff recommends implementing internet voting in the 2022 Municipal Election. Similar to the City of Burlington's model, staff is recommending that internet voting be implemented for the advance voting period only. In addition to internet voting, one or more physical voting locations would be open to allow voters to vote using paper ballots and vote tabulators. Staff recommends keeping with the current Voting Day model of paper ballots and vote tabulators, and accessible voting units.

Alternative Voting Methods

Staff will report back to Council in early 2021 regarding alternative voting methods for the 2022 Municipal Election.

Currently, staff is considering the possibility of relaunching the Home Voting Program during the advance voting period.

With the recent Covid-19 pandemic, staff will also be investigating a vote by mail option, where electors can request a special mail-in ballot to cast their vote. The City of Ottawa recently conducted a by-election and permitted mail-in ballots as an alternative form of voting, in addition to in-person voting.

Forty-eight (48) municipalities that participated in the AMCTO Post-Election Survey used vote by mail in the 2018 Municipal Election; the City of Toronto is currently researching the possibility of implementing vote by mail in its 2022 election.

Next Steps

Although the deadline to establish a by-law for voting and vote counting equipment will be extended through the passing of Bill 218, staff recommends that the voting model be finalized well in advance of the next election, in order to complete any required procurement processes and to allow for the necessary planning and testing associated with voting technology.

The following models exist for Council's consideration:

Model 1: Manual Count – The first model considered is to revert to a manual count system using no tabulation technology. Model 1 was discarded due to capacity and management considerations such as, higher possibility of human error (lack of consistency), increase in operating costs for election staffing, significant delay in providing results, and limited accessibility options. This model is not recommended by staff.

Model 2: Paper Ballots, Extend Current Technology Contract – this model would be the same as the 2018 voting model, however staff would investigate newer versions of the same technology offered by the current vendor. As discussed in this report, staff was satisfied with the voting technology provided by the current vendor, and the voting experience was successful, both for electors and for staff. Staff recommends this model, either exclusively or with internet voting (see Model 5).

Model 3: Paper Ballots, New Technology – this model would require a Request for Proposal (RFP) process to lease new voting equipment. The voting model would be the same as in previous years, with the use of paper ballots, but potentially different vote tabulation equipment and accessible voting units. This model is not recommended by staff.

Model 4: Internet Voting Only – this model considers purchasing technology that provides internet and telephone voting options as the sole methods of voting for the 2022 Municipal Election. Internet voting provides improved convenience and accessibility for the electorate. Voters who have a computer, laptop, tablet, and cell phone or land line can vote from anywhere, at a time most convenient for them. The voting period would be continuous from the beginning of the advance voting period to the “close of polls” on Voting Day. In this model, there would be no paper ballots or vote tabulators. This model is not recommended by staff; a phased approach to the introduction of internet voting is recommended to allow electors the opportunity to become familiar with the technology, and to provide staff the ability to evaluate the interest, use and success of internet voting before implementing it exclusively in an election.

Model 5: Internet and Paper Ballots – this model combines Models 2 and 4. Internet voting would be provided as the primary method of voting during the advance voting period, keeping one location (City Hall) to host electors who wish to mark paper ballots. Voting online during the advance voting period would be continuous (24/7) from the beginning to the end of the period. Being able to vote online easily and privately without the need to attend a voting location enables voters with disabilities to utilize their own assistive devices for the purpose of voting. For Voting Day, the sole voting method would be the use of paper ballots with vote tabulation and accessible voting equipment provided by our current vendor through contract extension. This model is recommended by staff.

Estimated Costs

The following are estimated costs for each model:

Model	Total	Comments
1: Manual Count	No additional cost related to technology	Extra costs may be associated to additional staff required to conduct a manual count.
2: Paper Ballots and Extension of Current Contract / 3: Paper Ballots and New Technology	$870,000 ($256,000 in 2021, and $614,000 in 2022)	Estimate developed based on RFI responses and historical costing data. Estimate contains incidental costs for laptops, tablets and other hardware and supplies required for processing electors at voting locations, as well as staffing costs associated with the management of vote counting equipment.
4: Internet Voting Only	$800,000	Based on 400,000 electors. Cost does not include postage services.
5: Internet and Paper Ballots	$1,670,000	Based on 400,000 electors. Cost does not include postage services.

Recommended Model: Model 5: Internet and Paper Ballots

Staff recommends that **Model 5** be implemented for the 2022 Municipal Election. Staff believe that introducing internet voting as an alternative voting method, rather than exclusively, is the prudent way to introduce new technology in an election.

Electors would have the opportunity to use internet voting during a defined advance voting period, where they could vote at any time of the day. Electors who wish to vote during the advance voting period by using a paper ballot, would have that opportunity by visiting City Hall.

On Voting Day, electors would visit physical voting locations to cast their vote using a paper ballot and vote tabulator, or with the assistance of an accessible voting unit.

If Council does not wish to implement internet voting in any form for the 2022 election, **Model 2** (extension of contract for vote tabulation equipment) is the recommended option.

The options included in this report do not preclude the implementation of vote by mail. For example, the City of London conducted a paper ballot and vote tabulator election in 2018, and offered vote by mail as an alternative form of voting. Vote by mail would not be required in an election conducted exclusively by internet voting, however, as they are both remote forms of voting that allow electors to vote independently without visiting a voting location.

Corporate Implications:

Financial Implications:

Overall project costs are estimated to be $1,670,000 for both Paper Ballot and Internet Voting.

Staff have submitted two capital budget requests related to election technology over two years, pending Council approval:

1. Elections – Paper Ballot Tabulation: $870,000 ($256,000 for budget year 2021 and $614,000 for budget year 2022)
2. Elections – Internet Voting: $800,000 for budget year 2022

The capital budget submission for the paper ballot tabulation project includes incidental costs for laptops, tablets and other hardware and supplies required for processing electors at voting locations, as well as staff resourcing for the management of the vote counting equipment.

Other Implications:

If a Request for Proposal (RFP) is required for vote tabulation equipment and/or internet voting contract service, the process will be completed in accordance with the Purchasing By-law.

Term of Council Priorities:

This report fulfills the Council Priority of a Well-run City by providing electors with an efficient and convenient voting experience through the use of election voting technology.

Conclusion:

Voting in municipal elections is one of the most important ways for citizens to engage in municipal governance. Current municipal adopters of internet voting such as Markham, Newmarket and Burlington, have highlighted the interest among the electorate and demonstrate that technology has matured to provide a secure internet voting experience.

Staff recommends Model 5 because the maturation of internet voting technology gives the City of Brampton opportunities to modernize election administration, enhance voter experience and improve efficiency. Internet voting has proven to be convenient for electors and secure for administrators. Vote tabulation equipment will enable the

election process to be an efficient and user-friendly experience for voters, providing greater accessibility, while maintaining the integrity of the election.

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