

Committee of the Whole (Working Session) Report

DATE: Wednesday, December 1, 2021

WARD(S): ALL

TITLE: INTERNET VOTING FOR THE 2022 MUNICIPAL ELECTION

FROM:

Wendy Law, Deputy City Manager, Administrative Services and City Solicitor

ACTION: DECISION

Purpose

To confirm that the technical and security requirements for the implementation of internet voting have been met to the satisfaction of the City Clerk / Returning Officer, and to recommend that Council proceed to authorize the use of internet voting for the Advance Vote period of the 2022 Municipal Election.

Report Highlights

- As reported by AMCTO, 49% of Ontario municipalities used internet voting for Advance Vote and/or Voting Day in 2018.
- In York Region, Markham, Newmarket and Aurora utilized internet voting in the 2018 Municipal Election and Richmond Hill conducted a school board by-election by internet in 2020.
- If authorized by Council, internet voting will be introduced exclusively during the Advance Vote period of the 2022 Municipal Election.

Recommendations

1. That Council authorize the use of internet voting for the 2022 Municipal Election; and
2. That the City Clerk / Returning Officer report back in 2023 on the outcome of the use of internet voting in the 2022 Municipal Election.

Background

The Role of the City Clerk in Elections

The *Municipal Elections Act, 1996* (MEA), in Section 11(1), identifies that the clerk of the municipality is responsible for conducting elections within the municipality. The MEA further identifies the powers of the clerk in Section 12, including the authority to provide for any matter or procedure not already provided for in the MEA, or in their opinion, is necessary for conducting the election. This authority must be carried out in an independent manner that reflects the principles of the MEA.

Background Reports

At its meeting of April 19, 2017, Council adopted recommendations from the City Clerk not to implement internet voting for the 2018 Municipal Election and for the City Clerk to report back no later than 2020 on security and other implementation measures specific to internet voting that may support consideration of this option for the 2022 Municipal Election. As part of its recommendations, Council confirmed the award of election services for leasing optical-vote tabulators in both 2018 and 2022 Municipal Elections to Dominion Voting Systems along with the option for internet voting in 2022.

As reported by the Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO) in their 2018 Post-Election Survey, 49% of municipalities responded indicating that they made use of internet voting for either Voting Day only, or Advance Vote and Voting Day. Locally, the City of Markham and the Town of Newmarket conducted remote internet voting for Advance Vote and Voting Day, while the Town of Aurora conducted Advance Vote using remote internet voting. The City of Richmond Hill used internet voting for the YRDSB Trustee by-election in October 2020.

In 2020, the City Clerk / Returning Officer engaged consultants from MNP to consider implementation measures for internet voting in Vaughan, including analyzing measures taken by municipalities which have already adopted internet voting. Consultants from iSecurity were engaged to consider the security of internet voting and to make recommendations on the City's internet voting solution and measures necessary for risk mitigation in implementing the internet voting method.

At its meeting of December 15, 2020, Council approved the recommendation, "That internet voting be authorized for the Advance Vote period for the 2022 Municipal Election, in principal, subject to the successful completion of testing and remediation of the City's internet voting solution;" following a staff report containing recommendations on the introduction and implementation of internet voting.

Previous Reports/Authority

[Item 2, Report No. 59 \(2020\) Extract – Consideration of Internet Voting for the 2022 Municipal Election](#)

Analysis and Options

Internet Voting Services Request for Proposal (RFP)

Based on the analysis and recommendations of the consultant teams engaged by the Election Services Division, an RFP for internet voting services was issued with comprehensive technical requirements based on expert recommendations and industry best practices, and a requirement to supply proof of certification and testing of internet voting systems to the highest standards available. Based on the responses received during this process, the City Clerk / Returning Officer recommends that Council authorize the implementation of internet voting for the 2022 Municipal Election.

The analysis and evaluation of internet voting services included over 100 technical requirements covering the voting process, accessibility and useability, voters' list integration, system configuration, integrity, secrecy, security, reporting and results, auditing, third party providers, system administration, data, performance/scalability, testing and acceptance, training and knowledge transfer, upgrades, system support, and maintenance and support services.

The voting process captures elements like the language in which information is provided online, a minimum two-factor authentication for voters to access the system, and voter verification. Accessibility and useability covers requirements for the system to be user-friendly, be compatible with common assistive technologies and programs, and compliance with current accessibility legislation and standards. The voters' list integration covers off requirements for seamless integration with the City's voters' list management application (Datafix), the ability to provide individual PINs for each eligible voter, and to ensure that voters are presented with the correct and appropriate ballot when voting online.

The assessment of system configuration covers requirements to provide virtual ballots that mirror the in-person paper ballot experience, listing candidates and offices correctly and the ability to customize the experience for the City of Vaughan. Integrity captures requirements for proof and support for a range of security assessments including privacy impact assessments, threat and risk assessments and vulnerability assessments, and ensuring compliance with legislation such as ensuring voters can only cast their ballot once. Secrecy ensures that the ballot cast by an elector is secure and confidential - that nobody may view the ballot until the results are decrypted following the close of voting.

Specific security criteria were assessed including protections and protocols to prevent tampering or hacking of the system, viruses and malware, limiting access from IP addresses located in countries flagged by the Government of Canada, and that marked ballots are secure from tampering or alteration during the entirety of the voting process. Reporting and results requirements included the ability to verify prior to the opening of Advance Voting that no ballots have been cast and similarly that no votes were cast after the internet voting period has ended, and the ability to report on ballots cast, election results and declined ballots.

The audit requirements included measures to track all administrator activities throughout the election, production of an audit trail which protects elector privacy, and to allow for periodic auditing to ensure the system is functioning as intended. The City required the disclosure of any third party providers supporting the internet voting service, and that they maintain security and privacy of elector data and that such providers have necessary physical and virtual security protocols in place.

System administration requirements covered the ability for election officials to be able to monitor and control a variety of functions and tasks as required to administer the election. Data requirements included ensuring the proper handling, protection and storage of internet voting systems including software and results. The City ensured that the internet voting system would be able to scale performance to meet peak demands from electors.

Testing and acceptance covered requirements for the ability to test the system prior to actual implementation during the Advance Vote, and acceptance that the system is working as intended. Training and knowledge transfer captured requirements for sufficient training of City of Vaughan employees and election workers in their administration or support of the internet voting process. System support and maintenance and support services covered requirements for customer service from the vendor, insurance and warranties, and issue response and resolution.

Implementation of Internet Voting for Advance Voting

It is the intent of the City Clerk / Returning Officer and the Election Services Division, to implement internet voting for the Advance Vote period of the 2022 Municipal Election only. This will allow for a phased in approach to the introduction of the internet voting method in the City of Vaughan, paired with a comprehensive education and training program to inform voters and engage them in this new voting method. Potential barriers to participation by internet voting related to internet access and requirements for assistance will be negated through the implementation of Voter Assistance Centres, which provide computers and support staff to help guide electors through the process.

The Voting Day experience would remain consistent with previous elections, allowing voters to mark paper ballots and deposit them into optical scan vote tabulators at voting locations in their neighborhoods.

Accessibility of Internet Voting

Internet voting provides additional accessibility options to electors, including the ability to vote away from home for students studying outside the geographic area, and for electors working or vacationing away from home. Internet voting also provides a more convenient voting option for electors that are caught up in the increasingly busy balancing work and family life – negating the need to attend a physical voting place. The internet voting option also negates ballot waste and the potential for an elector to incorrectly mark a ballot, with a virtual ballot and defined fields to mark the ballot, including ensuring electors cannot place an incorrect mark on the ballot or unintentionally overvoting a ballot.

Voting in the COVID-19 Environment

The realities of the COVID-19 environment add an additional benefit and consideration to the adoption of internet voting. The remote nature of voting by internet offers an alternative option to the large in-person gatherings that are associated with an in-person election and negates concerns about having to make contact with people outside of the household in order to participate in an election. An internet vote also avoids the need for election officials to handle physical ballots which would need to be quarantined for a period of time before being counted, in the case of a mail-in ballot option. As seen in the 2021 Federal Election, in-person voting processes are also hampered by the need to impose various public health measures to protect the voting public and election workers at physical voting places, something that is avoided entirely by voting online.

Risks Without Internet Voting

Should Council decide not to authorize internet voting for the 2022 Municipal Election, paper ballots counted and recorded by optical-scan vote tabulators will be the sole voting method available during both Advance Vote and Voting Day. There are long-term considerations that should be understood when determining whether to add additional voting methods, particularly those related to the rising costs to employ temporary election workers, increasing difficulty recruiting and retaining election workers through Voting Day, and the conduct of an election in a pandemic make maintaining the status quo a growing risk for the success of municipal elections in the City of Vaughan and limit the options for electors in Vaughan to participate in the democratic process in a time of modernization and increasing uptake in internet voting amongst Ontario municipalities.

Financial Impact

All costs associated with the conduct of municipal elections are funded by the City's Election Reserve. The cost for implementation is anticipated to be between \$150,000.00 and \$200,000.00.

Broader Regional Impacts/Considerations

There are no regional impacts associated with this report. The Regional Municipality of York is not involved in the determination of voting methods for the Mayor and Local and Regional Councillors who also sit on York Regional Council.

Conclusion

Election Services has undertaken a comprehensive and thorough process to ensure that internet voting services meet the highest standards of security, accessibility and ease-of-use, according to industry best-practices and professional recommendations of the consultant teams engaged in 2020. The RFP issued for internet voting services represents the most detailed and thorough issued by an Ontario municipality, and reflects the critical importance placed on election technologies.

The adoption of internet voting during the Advance Vote period for the 2022 Municipal Election will provide an easy-to use voting method that recognizes the increasingly fast-paced life of many Vaughan voters, extending voting to electors who are studying away, out on vacation or business, and provide a new avenue of accessible voting in the comfort of one's own home. The continuing realities of daily life with COVID-19 add an additional dimension to the consideration of internet voting, as the risks associated with traditional in-person voting are negated when electors are able to vote from the safety of home via computer or smartphone.

For more information, please contact: Evan Read, Manager, Elections and Special Projects, ext. 8241

Attachments

N/A

Prepared by

Evan Read, Manager, Elections and Special Projects, ext. 8241
Todd Coles, City Clerk / Returning Officer, ext. 8281

Approved by

A handwritten signature in black ink, appearing to read "Wendy Law".

Wendy Law, Deputy City Manager,
Administrative Services, and City
Solicitor

Reviewed by

A handwritten signature in black ink, appearing to read "Nick Spensieri".

Nick Spensieri, City Manager