



**City of Kingston  
Report to Council  
Report Number 26-065**

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**To:** Mayor and Members of Council  
**From:** Jenna Morley, City Solicitor  
**Resource Staff:** Janet Jaynes, City Clerk  
**Date of Meeting:** March 10, 2026  
**Subject:** 2026 Municipal Election – Voting Methods Information

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**Council Strategic Plan Alignment:**

Theme: Council requests

Goal: See above

**Executive Summary:**

The purpose of this report is to provide Council with an overview of the risks associated with voting methods that may be used in the 2026 municipal election, and the steps staff are taking to manage those risks. Internet voting, in-person voting with optical scan vote tabulators for ballot counting, and vote by mail are detailed in this report. This report also contains information on voting methods used by municipal comparators in 2022 and planned for use in 2026. For the purpose of this report internet voting and online voting are synonymous.

In [Report Number 26-047](#), staff recommended that Council approve a by-law authorizing the use of internet voting and optical scan vote tabulators for the 2026 municipal election. Based on the information contained in Report Number 26-047 and this report, the staff recommendation remains the same.

Staff from Voatz, the City's provider of online voting and optical scan vote tabulators, will provide a briefing to Council at the March 10 meeting regarding risk management, and will be available to answer questions from Council.

**Recommendation:**

This report is for information only.

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**Authorizing Signatures:**

ORIGINAL SIGNED BY CITY SOLICITOR

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**Jenna Morley, City Solicitor**

ORIGINAL SIGNED BY CHIEF

ADMINISTRATIVE OFFICER

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**Lanie Hurdle, Chief  
Administrative Officer**

**Consultation with the following Members of the Corporate Management Team:**

Paige Agnew, Commissioner, Growth & Development Services	Not required
Jennifer Campbell, Commissioner, Community Services	Not required
Neil Carbone, Commissioner, Corporate & Emergency Services	
David Fell, President & CEO, Utilities Kingston	Not required
Desirée Kennedy, Chief Financial Officer & City Treasurer	Not required
Ian Semple, Commissioner, Transportation & Infrastructure Services	Not required

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**Options/Discussion:****Background**

At its meeting on January 13, 2026, Council deferred consideration of [Report Number 26-047](#), Use of Optical Scan Vote Tabulators & Alternative Voting Methods for the Purpose of the 2026 Municipal Election, and 2026 Election Plan Enhancements and Considerations, and directed staff to return to Council with further information regarding the security and risk management of internet voting. This report provides that information, as well as information regarding other voting methods that may be utilized by Kingston, the risks associated with those voting methods and how those risks are managed. Information regarding voting methods used by Ontario municipalities in 2022, and planned for use in 2026, is also included.

Kingston has used a combination of internet voting and paper ballots for municipal elections since 2014. Telephone voting was also used in 2014 and has not been used since. Optical scan vote tabulators, used to tally the results from paper ballots, have been used in Kingston municipal elections since 1991.

Voatz was awarded a contract to provide internet voting services and optical scan vote tabulators to the City in 2022 via [Report Number 22-031](#). The recommendation to Council contained in that report included an option for staff to extend the contract for the 2026 municipal election.

**Legislative Background**

The *Municipal Elections Act, 1996* (the Act) and its associated regulations provide the rules for the conduct of municipal elections in Ontario. Section 11 of the Act states that the clerk of a local municipality is responsible for conducting elections within the municipality. Section 12 of the Act details the powers of the clerk as follows:

**12 (1)** A clerk who is responsible for conducting an election may provide for any matter or procedure that,

- (a) is not otherwise provided for in an Act or regulation; and
- (b) in the clerk's opinion, is necessary or desirable for conducting the election.

Subsection 12(1) above provides the clerk with broad powers in the conduct of a municipal election. Municipal clerks play a similar role to Elections Ontario and Elections Canada, both of which are non-partisan offices/agencies tasked with administering provincial and federal elections, respectively.

The role a municipal Council plays in an election is more defined. This is done to ensure that election processes are conducted free from the perception of political interference. The Act specifies a role for Council with respect to the following:

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- Passing a by-law with respect to submitting to electors a question on the ballot or a proposed by-law requiring the assent of electors (Section 8 of the Act);
- Passing a by-law with respect to allowing notices, forms and other information provided under the Act in languages other than English (Section 9 of the Act);
- Passing a by-law to authorize the use of voting and vote-counting equipment, and alternate voting methods, such as by mail or telephone, which do not require an elector to attend a voting place to vote (Section 42);
- Passing a resolution requiring a recount of votes cast (Section 57); and
- Establishing a compliance audit committee (Section 88.37).

### Security and Risk Management for Internet Voting

There are risks and benefits associated with any voting method utilized by a municipality. Staff take appropriate steps to manage the risks associated with each voting method and to balance those risks with the benefits of that method.

Since internet voting was first used in 2014, the percentage of Kingston voters using internet voting has increased from 26% of voters in 2014, to 37% of voters in 2018, to 49% of voters in 2022. A full break down of voting percentages by voting method can be found in [Report Number 26-047](#). Internet voting is advantageous for persons with disabilities who may find it difficult to vote by attending a voting place in person. Staff have consistently received this feedback when presenting election accessibility reports to the Municipal Accessibility Advisory Committee over the last several election cycles. Internet voting also increases the ability of non-resident voters (voters who own property in Kingston but do not live in Kingston) and resident voters, who are away from Kingston during the voting period, to vote.

Risks associated with internet voting include an inability to independently verify that a ballot cast on behalf of a voter was indeed cast by that voter, the potential for cybersecurity attacks that leave the election system and its results vulnerable to manipulation by malicious actors, and the absence of a verifiable, reliable audit that may be used to verify election results or if a recount were to be required. Each of these risks is managed in a variety of ways; further details regarding the risk management approach for internet voting are broken down into four subsections below: General Tactics, Cybersecurity and Prevention of Malicious Activity, Voter Identification and Results Verification, and Privacy.

#### General Tactics

- Voatz has confirmed that it is compliant with the [Digital Governance Standards Institute Online Voting Standards for Canadian Municipal Elections](#) (DGSi 111-1:2024). With the lack of any established legislation or government standards for internet voting, the DGSi 111-1:2024 represents the best standard for Canadian municipalities. The Committee

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that created the DGS1 111-1:2024 is comprised of more than 100 thought leaders and experts in cybersecurity, political science, public policy, election administration and related subjects.

- Voatz has received [ISO/IEC 27001:2022 certification](#), an internationally recognized standard for information security management systems, confirming that its policies, controls, and operational practices meet rigorous global requirements for protecting sensitive data.
- All election data, including primary and backup systems, are hosted and stored within Canada in compliance with Canadian data residency and privacy requirements.

### **Cybersecurity and Prevention of Malicious Activity**

- As in 2022, Kingston will partner with other municipalities using Voatz to conduct third-party penetration testing in advance of the online voting period, with vulnerabilities addressed prior to voting. This process is used to detect vulnerabilities and make improvements in advance of the start of the online voting period. In addition, Voatz conducts frequent penetration testing of all its assets, submitting its platform for testing by various government agencies and third-party testing laboratories.
- Internet protocol (IP) screening is used to monitor suspicious activity, along with the blacklisting of known threats and undesirable locations.
- The voting system uses an append-only ledger wherein manipulation is extremely difficult and easily detectable. Append-only ledgers allow for only new data to be added while the existing data remains unchanged, making it unfeasible to change existing data.
- Voters must solve a reCAPTCHA as part of verification process to reduce automated systems or 'bots' from casting ballots. A reCAPTCHA is used to distinguish between human users and automated bots using tests such as image matching and behaviour analysis, like mouse movement.
- The voting system is continuously monitored for performance, security events, and anomalous activity, with automated alerts and response procedures in place throughout the voting period.
- Voting system infrastructure is designed with geographic redundancy, automated failover, and real-time load balancing to maintain availability during peak voting periods through the use of geographically diversified cloud and blockchain infrastructure locations in Canada.

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- Use of Perfect Forward Secrecy that generates a one-time session key unique for each communication session. If a key for a specific session is compromised, it will not compromise data from any other session.
- To prevent 'Man-in-the-Middle' attacks, where legitimate traffic is intercepted and altered between the voter and voting system, the voting system uses an industry leading NIST FIPS 140-3 level 1 compliant web server security protocol along with other state of the art defensive measures.
- Measures are taken to prevent distributed denial of service (DDOS) attacks. DDOS attacks are malicious attempts to disrupt the normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of internet traffic. These measures taken include:
  - Managing traffic through a variety of routing types and additional advanced routing capabilities to protect domain names from domain name system based DDOS attacks;
  - Utilizing geo-blocking, which can isolate attacks originating from particular geographic locations;
  - Using customized web security rules to control which traffic accesses with endpoints;
  - Using load balancing to enable automatic distribution of application traffic to several Voatz services across multiple availability zones; and
  - Utilizing Amazon Web Services Shield and Web Application Firewall to ensure adequate security measures.

### **Voter Identification and Results Verification**

- Voter key proofing or two factor authentication is used, where the voter is required to enter one or more pieces of data (e.g. voter ID number and date of birth) that is matched against voter registration database. The voter then receives information via email to complete the voting process.
- Each online ballot contains a unique, anonymous confirmation ID which can be used to verify the presence and correctness of a submitted ballot in the blockchain during an audit. Voters receive an encrypted, password-protected ballot receipt which includes this confirmation ID but does not include the selections made on their ballot. New in 2026, the City is considering sharing a database of these anonymous confirmation IDs after the

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election results are declared. This would allow voters who voted using internet voting to independently verify that their votes were counted.

- Voters are provided the opportunity to confirm their selections before confirming that they wish to cast their vote and have to opportunity to alter their selection(s) before casting their ballot.
- Staff conduct logic and accuracy testing on the internet voting platform to ensure the final results match the candidates selected. This testing ensures the results are being collected and tabulated properly.
- City staff can verify how many ballots were cast, which candidates received votes, and which voters cast ballots; but the City is unable to match a voter's selections with a particular voter, protecting the secrecy of individual voters' ballots.
- Results can be independently validated by reconciling encrypted cast vote records with their zero knowledge proofs, system-generated ballot renderings and audit logs, confirming that the number of votes cast matches the number of votes counted.
- The voting system is capable of producing anonymous paper ballots for every digital vote.

## Privacy

- When the election is initiated, officials participate in a key generation ceremony that produces a public encryption key for the election that is used in the encryption of the ballots. This key is then used at the close voting window. Unlocking the digital lockbox to begin the counting of votes at the close of the voting windows requires at least two City employees to provide unique and private credentials.
- The voting system does not allow election officials or administrators to delete, change, forge or violate privacy of online ballots and within system there is no way to link a ballot to a voter's identity in the system.
- Ballots are protected using end-to-end cryptographic controls, including double envelope encryption prior to transmission, anonymization before recording, tallying, and immutable storage, ensuring ballots cannot be altered, deleted, or linked to a voter once cast.
- No local data storage in the client except for a session cookie, which expires automatically after brief period. Voters are automatically logged out after voting or cancelling the session and automatically timed out after a set period of inactivity. No information entered by the voter is stored on the user's device.

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- All communications between a user's device and backend systems are encrypted.
- Encryption keys used to protect ballots are never stored on voting servers and are inaccessible to vendors or administrators without City authorization.

### **Security and Risk Management for Other Voting Methods**

The following subsections provide an overview of different voting methods used by Ontario municipalities. Each section contains a brief description of the method; the risks associated with the method; and the management of those risks.

It is important to note that the risk present in online voting via the inability to independently verify that a ballot cast on behalf of a voter was indeed cast by that voter exists for all voting methods allowable in Ontario. This risk stems from the identification regulations in the *Municipal Elections Act, 1996*. This risk is explored further in each section that follows.

#### **In-Person Voting and Optical Scan Vote Tabulators**

Since 2014, the percentage of Kingston voters participating in-person at physical voting location has dropped from 72% in 2014 to 61% in 2018 to 49% in 2022.

In-person voting requires a voter to physically attend a specific voting location to cast their ballot. Those voters that are on the voters' list receive a voter card in the mail that contains information on where and when to cast their ballot. A voter card, when presented alongside prescribed identification, enables a person to receive a ballot. A full list of prescribed identification is contained in [Ontario Regulation 304/13](#). Prescribed identification only requires the voter's name and qualifying address. Some forms of prescribed identification include photos, such as a driver's licence or health card. Many forms of prescribed identification do not include a photo, such as a mortgage statement or lease, income tax assessment, utility bill, property tax assessment or credit card statement.

A voter is not required to have a voter card in order to receive a ballot for in-person voting. Providing a single piece of prescribed identification is all that is required if the voter is on the voters' list. If the voter is not on the voters' list, but has a piece of prescribed identification, they may complete an application at the voting place to amend the voters' list and receive a ballot.

If a voter is not on the voters' list and does not have prescribed identification, they may still receive a ballot by completing an application to amend the voters' list and a [Declaration of Identity \(Form 9\)](#). Form 9 is a statutory declaration provided by the provincial government where the voter swears before a deputy returning officer that the name and address provided in the form are true.

Given the foregoing, with in-person voting, it is not possible to verify with absolute certainty that the voter casting a ballot is the person they are claiming to represent.

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Optical scan vote tabulators (tabulators) are used to electronically count ballots that are cast via in-person voting. Results from individual tabulators are uploaded to a central repository where they are summed and used to generate vote counts.

Tabulators significantly reduce the time it takes to receive the results from an election when compared to hand counting of ballots. This is particularly important for municipal elections where seven individual races require counting (Mayor, district councillor and four individual school boards) as compared to single races during federal and provincial elections. Tabulators, when programmed properly through logic and accuracy testing (described below), significantly reduce the potential for errors experienced in hand counting of votes. Tabulators also have the ability to indicate when errors are present on a ballot, such as overvoting (i.e. selecting more than the maximum number of candidates in a race) or blank ballots, ensuring that all voters have the ability to cast an accurate ballot and reducing the potential for spoiled ballots.

Staff conduct logic and accuracy testing of the tabulators before an election. A set of pre-marked ballots are run through the tabulators to ensure the results tabulated match the selections on the ballots. Following logic and accuracy testing, tabulators are stored in a secure location and not removed until their use on advance voting or voting day. Tabulators may only be set to receive ballots through use of a security key and password provided to the site supervisor at voting places. Tabulators are not linked to any network, with results uploaded via a secure portal following the close of polls on voting day, reducing the risk of manipulation of the tabulators by malicious actors.

### **Vote By Mail**

Vote by mail is an alternate form of voting that allows a voter to cast a ballot without physically attending a voting place. Kingston has not used vote by mail in previous elections. While specific processes differ between municipalities, vote by mail generally uses the following process:

- A voter completes an application, online or in-person, requesting a mail in ballot package. The applicant is required to provide prescribed identification to confirm their identity, either by showing staff in-person, or uploading a copy of that identification to a secure, online portal;
- Election staff review the application and identification provided by the voter;
- If an application is approved, election staff provide a voting kit to the voter. The voting kit typically includes an instruction sheet, a ballot, an inner ballot secrecy envelope, a voter declaration form, and an outer return envelope with prepaid postage. Additional information or instructions may also be included. All voter kits are sent at the same time to approved applicants, within a few days of the end of the deadline to register for voting by mail;
- Once the voting kit is received, the voter completes the ballot, places the ballot inside the inner ballot secrecy envelope and seals the envelope. The voter completes the voter

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declaration form and places the inner ballot secrecy envelope and voter declaration in the outer return envelope. The entire package is then mailed to the Election Office or returned in-person before the established deadline; and

- Election staff store all returned voting kits in a secure area until such time as the deadline to receive voting kits has passed. Election staff then open each voting kit and process the ballots contained therein.

Once a voter is approved to vote by mail, they are unable to vote by any other method. This is tracked by election staff through voters' list management software.

Voting by mail has a similar fraud risk as internet voting and in-person voting with respect to voter identification. The prescribed identification for this purpose does not require picture identification, and if a person is completing an online application, staff are unable to verify independently if the application is being submitted by the voter who is named on the application. Additionally, the potential exists for a vote by mail ballot to be filled in by someone other than the applicant and returned to the Elections Office. The risk of mail-in ballot fraud on a scale that would affect an election result is considered low because it would require physical interception of many ballots in dwellings and/or the federal mail system, which would require physical access and collusion involving multiple parties. Internet based threats are conceptually similar but easier and less expensive to execute on a large scale by individuals.

### **Municipal Scan**

The [Association of Municipalities of Ontario](#) collected information regarding election methods used by municipalities for 2022 elections. 217 municipalities used a combination of internet/phone/paper ballots, an increase of 42 municipalities from 2018. Examples of municipalities that used internet voting in 2022 include Barrie, Belleville, Kawartha Lakes, Owen Sound, Ajax, Cobourg, Brantford, Burlington, Cambridge, Markham, North Bay, Pembroke, Peterborough, Pickering, Richmond Hill, Sarnia, Thunder Bay, Timmins, Vaughan, Prince Edward County, Chatham-Kent, Aurora, Quinte West, and Brighton. The complete list of the 217 municipalities that used internet voting in 2022 elections (either exclusively or in combination with other methods) can be found on the [AMO website](#).

A survey undertaken by a working group composed of municipal staff responsible for elections gathered data on voting methods to be used in 2026 municipal elections as compared to those voting methods used in 2022. The table on the following page provides the results of the survey, which includes 40 Ontario municipalities varying in population from just over 3,000 to over 1,000,000. The average population of municipalities surveyed is 162,062, with the median population being 54,850. The survey was conducted in November 2025, with 35 of the 40 municipalities having received Council approval for their 2026 voting methods.

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**Table 1: Voting Methods Used by Ontario Municipalities, 2022 and 2026**

<b>Voting Method</b>	<b>Number of Municipalities That Used Voting Method in 2022</b>	<b>Number of Municipalities Using That Voting Method in 2026</b>
<b>Manual Count</b>	2	1
<b>Optical Scan Tabulator</b>	24	25
<b>Internet Voting</b>	26	29
<b>Telephone Voting</b>	12	10
<b>Voting by Mail</b>	7	5

Of note, Oshawa, Woodstock and Uxbridge will be using internet voting in 2026; these municipalities did not use internet voting in 2022. All municipalities surveyed that used internet voting in 2022 are continuing internet voting in 2026.

Guelph was directed by Council to consider internet voting in 2026. Staff with the City of Guelph ultimately recommended that online voting not be used in 2026 citing concerns with recent cybersecurity incidents in Ontario municipalities, limited verifiability with digital count, audit and recount and the conclusions of provincial and federal election administrators with respect to internet voting.

The company that is recommended to provide internet voting for the City of Kingston (Voatz) has confirmed it will be providing internet voting for the following municipalities in 2026: Burlington, Newmarket, Barrie, Greater Sudbury, Thunder Bay, Chatham-Kent, Prince Edward County, Richmond Hill, Peterborough, North Bay, Whitewater/Renfrew (group of nine municipalities), Haliburton County (group of four municipalities), Cornwall (group of seven municipalities) and United Counties of Prescott & Russell (group of seven municipalities).

**Indigenization, Inclusion, Diversity, Equity & Accessibility (IIDEA) Considerations**

Alternate voting methods that allow a voter to cast their ballot independently while maintaining vote secrecy are a crucial accessibility consideration. Persons with disabilities may find it difficult to leave their home and attend an in-person voting place. Internet voting is one way the City enhances the accessibility of the voting process. In-person voting places used by Kingston are

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reviewed by City staff and members of the Municipal Accessibility Advisory Committee for accessibility before their confirmation as a voting place. Those attending an in-person voting place have the option to use accessible voting equipment to help mark their ballot independently. These technologies include audio instructions that read the ballot out loud, along with touch screen selection, or the use of a rocker paddle or sip and puff device.

Internet voting has been shown to be a preferred voting method for persons with disabilities. Guelph's public engagement with respect to alternate voting methods concluded that internet voting was the most accessible option and most preferred based on public engagement. Kingston's [Municipal Accessibility Advisory Committee](#) (MAAC) generated similar conclusions in 2022, commenting that internet voting was beneficial for those with accessibility considerations.

Staff consulted with members MAAC's Awareness & Education Project Team in February 2026 regarding accessibility considerations for voting methods. Below is a summary of that feedback:

- Members were supportive of online voting and identified it as a preferred method compared to in-person voting or vote by mail.
- Members identified that online voting reduces barriers to participation for those with mobility or sensory disabilities. It was identified that given the diverse needs of persons with disabilities, it is highly unlikely that an in-person voting place can meet all requirements for accessibility.
- Online voting was identified as having additional accessibility features, including the ability to use screen reading software to assist voters and the ability to vote using a variety of devices such as computers, cell phones or tablets.
- Vote by mail was confirmed as an acceptable alternative voting option, however it was identified that the additional steps and procedures, as well as the need to physically mail the ballot back for counting, are additional barriers to participation.

### **Existing Policy/By-Law**

*Municipal Elections Act, 1996*

### **Financial Considerations**

Sufficient funds exist in the approved budget for the 2026 Municipal Election to administer the election using any combination of the voting options described in this report.

### **Contacts:**

Janet Jaynes, City Clerk, 613-546-4291 extension 1252

### **Other City of Kingston Staff Consulted:**

Blair Johnson, Manager, Corporate Records & Information

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Derek Ochej, Deputy City Clerk

Scott Tulk, Interim Chief Information Officer

**Exhibits Attached:**

None