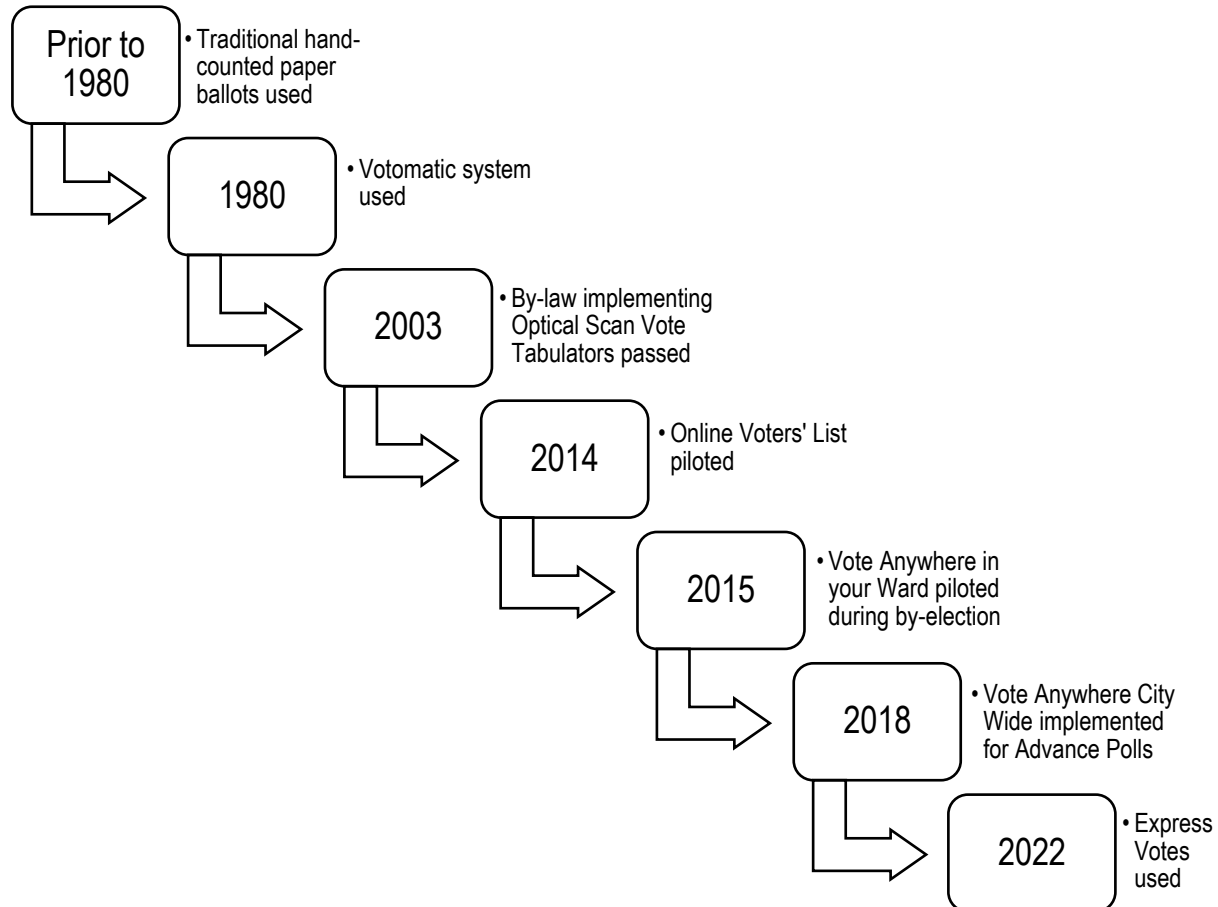


History of Election Technology in City of Mississauga Elections

Overview of Election Technology Implementation



Detailed History

Prior to 1980, the City of Mississauga used a traditional paper ballot with a manual hand-count system of voting. In 1980, Council passed a by-law implementing the use of the Votomatic System. With this system, voters used a stylus and a punch card to make their selections on a ballot. At the close of voting, ballots were transferred from the voting locations to a central counting area at the Civic Centre. Votes were tabulated at the central counting area using ballot card readers.

In 1999, the City of Mississauga investigated the use of a variety of new election technology to replace the Votomatic system. As a result, Council passed a by-law implementing the use of Optical Scan Vote Tabulators (tabulators). An updated version is still used today. Benefits of the system are:

- Ballots can be inserted into the tabulator at the voting location and do not have to be transported to a central counting area at the end of the night

- There is consistency in reading the marks on each ballots; in other words interpretation of a mark on a ballot is not left up to individual Deputy Returning Officers during as with a manual ballot count
- If the voter's intention is not clear because they over-voted or if the voter fails to vote for a contest, the tabulator can alert the voter and the ballot is returned by the tabulator. The voter is then able to cast their ballot as is, or they can make changes to the ballot. In these instances, the tabulator does not reveal any information about the voter's choices, just that there is a problem reading the ballot. In a hand count, voters are not afforded this opportunity as election officials review ballot markings and make tallies at the close of voting once a voter is no longer there
- Results are transmitted quickly to election headquarters at the close of voting. In Mississauga, each ballot contains three contests as voters can vote for Mayor, City Councillor and School Board Trustee. Doing a manual count for composite ballots such as the ones described above, is time consuming and labour intensive and the time it would take to finalize results is significant
- Staff can conduct an audit post-election to ensure that the results transmitted to election headquarters on election night match those recorded by the tabulator
- Election and I.T. staff are confident in the function and security of the machines and have been able to put safeguards in place to ensure that the tabulators record and transmit results securely and accurately
- Tabulators are an industry standard used in municipal elections across Canada and in Ontario provincial elections
- The MEA provides information on conducting elections using vote counting technology; conversely, other than allowing the use of alternative voting methods, it does not provide requirements for how alternative voting methods such as internet voting, mail in voting, telephone voting etc. should be used

In 2014, the City of Mississauga piloted the online Voters List, which would eventually reduce the use of hard copy Voters' Lists. With the successful use of the online Voters' List, the Vote Anywhere Program was piloted during the 2015 Ward 4 By-election. Through this program, voters were no longer restricted to one ballot issuing election worker and one voting location. Instead, voters could vote at any voting location in Ward 4. This is because the online List allowed all of the ballot issuing election workers to see all of the voters that had already voted in the by-election, eliminating the ability of voters to go to another location and vote. Additionally, serving voters worked like a bank line-up in that there was one central line and voters were not limited to one ballot issuing officer.

In 2018, the City expanded the program to a General Election. Voters were able to vote at one of 22 locations available throughout the City on Advance Poll Days. On Election Day, they could vote at any voting location in their Ward. In 2022, Vote Anywhere was used again and 20% of voters voted at locations outside of the Wards on Advance Poll days. The benefits of the system include:

- Flexibility and options for voters
- The ability for ballot issuing officers to see if voters have already voted at another location

One of the challenges to the Vote Anywhere model is that ballot issuing election workers are required to handle 55 different ballot types on Advance Poll Days. This is because for each of the 11 Wards electors are entitled to one of 5 ballot types based on school support:

- English Separate
- English Public
- French Separate
- French Public
- Non-resident

Handling hard copies of 55 ballot types is cumbersome for workers and poses challenges to packing, distributing and transporting ballots to the voting locations. In addition, ballot distribution across the City becomes complicated because it is unclear how many voters from each Ward and for each school support will vote at any one location. To eliminate these concerns, the City implemented the ExpressVote Universal ballot marking system on Advance Poll Days for the 2022 Election.

The system works as follows:

- Voter shows their identification to a ballot issuing election worker
- Ballot issuing election worker vets the voter's eligibility and if the voter meets all requirements they are struck off of the Voter's List
- Ballot issuing election worker prints the appropriate ballot for the voter
- The voter inserts the blank ballot into the ExpressVote machine and uses a touch screen to mark their selections
- Voter has the opportunity to review their candidate choices and if satisfied, the voter prints the ballots with the voters' choices
- The voter can review the printed ballot and make sure they are satisfied with their choices
- Once printed, ballots are inserted into the tabulator; the ExpressVote is not a tabulator and does not record results nor is there a connection between it and the tabulator

Conclusion

Election technology has evolved significantly since the City implemented the Votomatic system of voting. Staff routinely evaluate emerging technology and industry standards to understand their efficacy and their impact on elections. They also observe what other municipalities are implementing and consider their challenges and successes to understand how the technology would work for Mississauga voters.