Summary

The 2018 Municipal Election was successfully delivered on October 22, 2018.

The City saw more than 9,000 ballots cast over eight days of Advance Voting, a 9.6% increase from 2014. This increase reflects the reduction in total Advance Vote days from ten to eight, the introduction of two transit voting locations, and dates selected to be closer to Voting Day.

Figures for Voting Day saw a slight decrease of 3.39%. The total voter turnout for the election was approximately 27%, with over 54,000 ballots cast across the City. Municipalities across the province also observed a decrease in overall voter turnout.

Eleven key changes were introduced to create efficiencies and streamline processes through technology. Some key implementations and results worth noting:

1. 27 peak-hour staff were deployed in a pilot to supplement voting locations with additional City staff in preparation for the evening voter rush. This was effective in alleviating line-ups at large and busy locations.

2. An eLearning platform with video content was introduced and was well received by hired election officials.

3. Two transit voting locations were used for the first time at the Vaughan Metropolitan Centre and Highway 407 subway stations. Commuters praised the initiative for its convenience and innovative use of space. The City of Vaughan is the first municipality to host transit voting locations (specifically subway stations) in the province.

4. Over 50% of voting locations were technology enabled. Election officials were able to process voters faster and apply revisions in real-time to the Voters’ List.

5. Candidates were granted access to the Candidate Access Portal, where documentation including maps were stored for referencing. The Portal also provided real-time access to the Voters’ List, which candidates could download and use for campaign purposes.

Most of the changes introduced delivered the intended results, which had positive downstream impacts. However, there remains a few key areas of challenges:

1. Participation of City staff remains very low, despite an increase from previous years to 251 applicants.

2. Quality of external applicants is low due to the nature of a single day position.

3. Accuracy of the Voters’ List continues to be a problem amongst election administrators.

The review of the Elections project from planning to execution rendered over 25 recommendations with action items to address the findings.
1. Background

1.1. General Overview

The City Clerk has the statutory responsibility to conduct regular elections every four years, as well as by-elections when required. The general election of municipal and school board candidates for the four-year term commencing December 1, 2018 was held on October 22, 2018. Eight continuous Advance Vote dates were held from October 11 to October 18.

Pursuant to section 11 of the *Municipal Elections Act, 1996* (the Act) in Ontario the Clerks of local municipalities are responsible for conducting the municipal and school board elections within their municipalities. This includes responsibility for:

1. preparing for the election;
2. preparing for and conducting a recount in the election; and
3. maintaining peace and order in connection with the election.

1.2. Overview of Election Planning Process

The election planning process started 18 months prior to Voting Day. Resources across the organization were gradually engaged as project tasks ramped-up to full production, approximately six months in advance. A high-level timeline of the planning process is shown in Figure 1.

*Figure 1: Key Election planning activities and timelines*
2. Review Objective and Scope

Our review objective was to assess whether the execution of the 2018 Municipal Election was completed in accordance with the plans. We acknowledge that flexibility and contingency are key to the successful delivery of any large-scale project. Lessons learned from variances between plan and execution serve to identify opportunities for future elections and projects of similar scope and complexity.

The scope of this review was limited to the 18 months leading up to Voting Day, commencing on February 2017. In addition, only the administration’s legislative requirement to plan and deliver an election on the selected Advance Vote dates and assigned Voting Day were reviewed. That is, requirements beyond Voting Day are not in scope for this review. Matters such as the quantity, quality and availability of products and services offered by vendors and contractors are also out of scope as the administration did not have direct control.

We conducted the review between November 2018 and February 2019. There were six primary sources of information that were reviewed:

1. Transcripts from lessons learned
2. Vendor reports
3. Workflow documentation
4. Issue logs from Advance Vote and Voting Day
5. Feedback forms from Advance Vote and Voting Day
6. Emails

A few notes on the quality and limitation of the data analyzed:

1. We recognize that both staff and voters with negative experiences are more likely to provide feedback than those with positive experiences.
2. The lessons learned transcripts only reflect the experience of internal staff. As such, we are cognizant that the feedback provided may be partial due to their employment status with the City.
3. The municipality does not have existing benchmarks for election metrics, limiting any comparative performance reviews possible.
3. Key Changes from 2014

1. **Mass adoption of ePoll technology** – ePoll notebooks and peripherals deployed to voting locations (except for condos and special polls) allowing real time access to the electronic Voters’ List. A limited pilot was done in 2014 at five “super polls.”

2. **Online Employment Application** – an online form was introduced to simplify the application process for election workers. It was designed as a simple questionnaire to capture critical applicant information such as level of computer literacy and prior election work experience. All applicants were required to complete an online application.

3. **Election Worker Portal** – a web-based application was procured to assist election officials to track their application status, work assignments, schedule training and access training material.

4. **Election Worker Management Portal** – a web-based application was procured to assist administrators with the management of employment applications, staff assignments and resource distribution.

5. **Extended Period** – the recruitment period for both internal (City staff) and external applicants (non-City staff) was doubled from 2014. The internal application period was four weeks and eight weeks respectively for external.

6. **Peak-hour staffing** - Based on analysis of prior elections, the evening hours of 4:30PM to 8:30PM are the busiest in most polls. Peak-hour staff were deployed to supplement existing staff at selected voting locations.

7. **eLearning Modules** - content shared in a dynamic and interactive platform. Large amounts of information can be presented in this manner for election officials to learn at their own pace. Modules were hosted on the City’s media server, making it accessible anywhere internet was available.

8. **Software simulation** – hands-on training of the Voters’ List Management software – VoterView Express – was provided to all election officials requiring access. Relevant peripherals such as scanners and printers were also provided to simulate the Voting Day experience.

9. **Removal of “super polls”** – existing polling subdivisions formally assigned to “super polls” were redistributed across multiple voting locations for balance.

10. **Transit voting locations** – the two new subway stations located in Vaughan, were transformed into voting locations targeting commuters on two Advance Vote days.

11. **Candidate Access Portal** – a web-based application was procured to enable election administrators to share critical documents, maps and real-time access to the electronic Voters’ List.
4. Fact Sheet

4.1. 9.6% increase in Advance Vote Turnout

An additional 791 ballots were cast during the Advance Vote period in 2018, despite having two less Advance Vote dates compared to 2014. The dates were also made to be continuous – a change which made it easier to promote. Table 1 shows the year-by-year comparison for Advance Vote metrics.

Table 1: Advance Vote metrics

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Advance Vote Days</td>
<td>9</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Number of Advance Vote Locations</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Number of Ballots Cast at Advance Vote</td>
<td>4,658</td>
<td>8,226</td>
<td>9,017</td>
</tr>
<tr>
<td>Advance Voter Turnout</td>
<td>2.65%</td>
<td>4.31%</td>
<td>4.45%</td>
</tr>
</tbody>
</table>

4.2. 23% increase in registered candidates

A total of 74 registered candidates ran for office in the City of Vaughan – the distribution by office is shown on Table 2. This number includes any offices which appeared in more than one municipality’s ballots such as the York Region District School Board Area 3 Trustee, Conseil Scolaire Catholique MonAvenir Trustee and Conseil Scolaire Viamonde Trustee.

4.3. 448 ePoll notebooks procured

Through the Elections Ontario Technology Sharing Program, 448 ePoll Notebooks and peripherals were procured at cost. This was approximately nine times the amount of technology deployed in 2014. Despite the vast increase in technology, there was a cost savings of approximately $12,000 when compared to the previous election.

4.4. 1,582 employment applications received

Modernization of advertising channels targeting technology savvy election workers resulted in a spike of applications received. A total of 1,582 applications were submitted for consideration, more than double the amount received in 2014. Advertising channels such as job search engine Indeed and social media had a wide reach while being cost effective.
Table 2: Distribution of registered candidates by office

<table>
<thead>
<tr>
<th>Office</th>
<th>Number of Candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAYOR</td>
<td>3</td>
</tr>
<tr>
<td>LOCAL AND REGIONAL COUNCILLOR</td>
<td>11</td>
</tr>
<tr>
<td>WARD 1 COUNCILLOR</td>
<td>6</td>
</tr>
<tr>
<td>WARD 2 COUNCILLOR</td>
<td>7</td>
</tr>
<tr>
<td>WARD 3 COUNCILLOR</td>
<td>7</td>
</tr>
<tr>
<td>WARD 4 COUNCILLOR</td>
<td>3</td>
</tr>
<tr>
<td>WARD 5 COUNCILLOR</td>
<td>2</td>
</tr>
<tr>
<td>YORK CATHOLIC DISTRICT SCHOOL BOARD AREA 1 TRUSTEE</td>
<td>3</td>
</tr>
<tr>
<td>YORK CATHOLIC DISTRICT SCHOOL BOARD AREA 2 TRUSTEE</td>
<td>5</td>
</tr>
<tr>
<td>YORK CATHOLIC DISTRICT SCHOOL BOARD AREA 3 TRUSTEE</td>
<td>3</td>
</tr>
<tr>
<td>YORK CATHOLIC DISTRICT SCHOOL BOARD AREA 4 TRUSTEE</td>
<td>2</td>
</tr>
<tr>
<td>YORK REGION DISTRICT SCHOOL BOARD AREA 1 TRUSTEE</td>
<td>7</td>
</tr>
<tr>
<td>YORK REGION DISTRICT SCHOOL BOARD AREA 2 TRUSTEE</td>
<td>5</td>
</tr>
<tr>
<td>YORK REGION DISTRICT SCHOOL BOARD AREA 3 TRUSTEE</td>
<td>6</td>
</tr>
<tr>
<td>CONSEIL SCOLAIRE CATHOLIQUE MONAVENIR</td>
<td>2</td>
</tr>
<tr>
<td>CONSEIL SCOLAIRE VIAMONDE</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

4.5. 3.39% Decrease in Voter Turnout

For the second election in a row, voter turnout decreased. Although the drop was significantly lower than in previous elections (approximately 10% from 2010 to 2014), the trend of lower voter turnout continues to be observed. Note, metrics regarding voter turnout are for comparison purposes only, as administrations cannot control for external influencing factors. Table 3 is a snapshot of metrics for the previous three elections.

Table 3: Metrics for previous three elections.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Eligible Voters</td>
<td>175,470</td>
<td>190,724</td>
<td>202,401</td>
</tr>
<tr>
<td>Number of Candidates</td>
<td>60</td>
<td>60</td>
<td>74</td>
</tr>
<tr>
<td>Number of Ballots Cast</td>
<td>71,145</td>
<td>57,749</td>
<td>54,434</td>
</tr>
<tr>
<td>Voter Turnout</td>
<td>40.55%</td>
<td>30.28%</td>
<td>26.89%</td>
</tr>
<tr>
<td>Number of Polling Subdivisions</td>
<td>496</td>
<td>527</td>
<td>580</td>
</tr>
<tr>
<td>Number of Voting Locations</td>
<td>107</td>
<td>79</td>
<td>118*</td>
</tr>
<tr>
<td>Number of Tabulators Used</td>
<td>105</td>
<td>107</td>
<td>132</td>
</tr>
</tbody>
</table>

*Includes four Advance Vote locations not used on Voting Day: Promenade Mall, Dufferin Clark Community Centre, Vaughan Metropolitan Centre and Highway 407.
5. **Recruitment**

5.1. **Detailed Observations and Lessons Learned**

5.1.1. **Recruitment of qualified, computer proficient election officials is difficult**

An online application form was introduced, eliminating the tedious paper application process used in previous elections. This change was implemented to facilitate the application review process but more importantly, as a preliminary screening of computer proficiency (a mandatory skill due to the introduction of ePoll technology). It was assumed that a basic level of computer literacy was needed for applicants to navigate and complete the form. Applicants were also required to rate their level of computer literacy on a scale of zero to four (see Table 4).

In the review process, it was observed that majority of applicants inflated their computer literacy skills. This misrepresentation led to poor position and location matches between the needs and the actual skills of the election officials. Three common reasons for bias and inflation were found:

1. **Unaware that some voting locations were not technology enabled.** Individuals believed that overstating their computer literacy would secure them a position. Applicants were not aware of the limited paper-based positions available, where low computer literacy could be accommodated.

2. **Comfort using similar technologies.** A significant number of applicants are daily users of mobile devices (primarily smartphones and tablets). As many of these devices are advertised as computer replacements, applicants assumed their knowledge would directly translate.

3. **Individuals did not submit their own applications.** Family members or friends were applying on behalf of others. In answering the self-assessment questions, they were inadvertently assessing their own skills – not those of the person they were applying on behalf of.

**Recommendation 1**

To prevent any assumptions about the available employment opportunities, openly advertise all the positions and requirements for each position on the election employment page and the landing page for the online application form.

**Recommendation 2**

To discourage inflated assessments of one’s computer literacy skills to secure a position, amend the online application form to allow applicants to select the type of voting location (paper or technology) they would like to apply for.
Recommendation 3

To validate the computer literacy of individuals wishing to work in technology enabled voting locations, implement an in-person computer testing process.

Recommendation 4

We recommend the administration develop a screening process for election officials that follows the existing corporate standard.

Table 4: Applicant self-assessment of computer proficiency

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No experience - I have never used a computer</td>
</tr>
<tr>
<td>1</td>
<td>Novice - I am new to using a computer</td>
</tr>
<tr>
<td>2</td>
<td>I can perform basic functions (i.e. word processing, data entry)</td>
</tr>
<tr>
<td>3</td>
<td>Intermediate - I can use a few applications to resolve simple problems with occasional assistance</td>
</tr>
<tr>
<td>4</td>
<td>Advanced - I can perform large complex tasks with minimal assistance</td>
</tr>
</tbody>
</table>

5.1.2. City of Vaughan staff participation remains low

A record number of internal staff applied for election official positions, 251 internal applications were received. This still accounts for a very small percentage of total City staff. Our analysis found two primary reasons for the low internal staff participation.

1. **Lack of management support.** Many election officials stated that their managers or supervisors did not support or encourage their participation in the election. Some were misinformed that they would be required to take a personal vacation day if they wanted to work on Voting Day. Although this information was contrary to the agreed upon message with the City’s Senior Management Team, it still discouraged City employees from applying and forced some to withdraw their application.

2. **Negative past election experience.** Some internal staff opted not to work on Voting Day because of negative experiences with past elections.

Recommendation 5

We recommend the administration, in collaboration with the Office of the City Manager, develop a sustainable incentive program to encourage participation from City staff allowing all election positions to be filled with internal staff only.
6. Staffing

6.1. Detailed Observations and Lessons Learned

6.1.1. Peak-hour staffing model is effective at alleviating line-ups

A total of 27 peak-hour staff were deployed in preparation for the evening rush. Voting locations receiving peak-hour staff were chosen based on existing staff complement, anticipated voter turnout and requests by ward managers. As such, two primary types of voting locations benefited from the model – large polls and busy polls. Most peak-hour staff arrived between 4:00PM and 4:30PM, having just enough time to setup their workstations.

The overall feedback of the pilot was positive. Managing Deputy Returning Officers (MDROs) of larger voting locations needed the additional help – especially from experienced staff (which a high number of peak-hour Deputy Returning Officers (DROs) were). The benefits of the additional staff were most evident in the last hour leading up to the close of polls. It was noted that locations that received peak-hour staff, were able to process and close quicker than those that did not but were of similar size and voter turnout.

Recommendation 1

We recommend the continuation of the peak-hour staff model due to its overall positive feedback, and the flexibility it offers for both voting locations and internal staff wanting to participate.

6.1.2. Notable differences between internal and external staff

31.8% of hired election officials were internal staff, with the remaining 68.2% as external hires. In reviewing the performance appraisals submitted by MDROs, notes made by trainers and logs, notable differences between the two types of resources were observed.

1. Internal staff showed a higher rate of computer literacy and were found to be more comfortable when introduced to new technology.

2. Internal staff were also found to be more reliable and punctual.

3. External MDROs and Tabulator Deputy Returning Officers (TDROs) logged significantly less support calls to Election Central.

4. The overall level of election experience was also higher for external staff. A large percentage of external applicants had worked in multiple elections (including provincial and federal).

5. Training completion rate (both in-person and eLearning Modules) was higher for internal staff. This may be attributed to the fact that training was completed during regular office hours for internal staff.
6.1.3. High employee attrition rate

The overall employee attrition rate for this election was 46.78%. **Figure 2** shows a detailed breakdown of the application status. Insufficient data from previous elections prevents baselining and comparisons for this metric. Anecdotally, nearby municipalities experienced a spike in their rate of attrition relative to previous years. Like Vaughan, most dropouts occurred in the last 48 hours leading up to Voting Day. No data was collected on the reasons for cancellations.

**Recommendation 2**

We recommend the administration, in collaboration with the Office of the City Manager, develop a sustainable incentive program to encourage participation from City staff allowing all election positions to be filled with internal staff only.

**Figure 2: Applications status**
6.1.4. Volume and frequency of staff changes contributed greatly to Voting Day staffing issues

In our analysis of the recruitment data, a concerning number of last-minute changes were made in the 48 hours leading up to Voting Day. The largest driver of these changes were insufficient staff due to cancellations. The recruitment team had to continuously rearrange the voting location staff composition to accommodate the updated number of staff available.

**Recommendation 3**

We recommend a change freeze be applied 48 hours prior to Voting Day to establish a staffing baseline. Any changes required within these 48 hours should be deemed as an “emergency change” and management must review and approve the request.

7. **Training**

7.1. **Detailed Observations and Lessons Learned**

7.1.1. eLearning platform was well received but did not improve information retention

eLearning was used for the first time to train election officials. User feedback received was very positive. Election officials appreciated the convenience of being able to access the training material anywhere internet was available. It also offered them the ability to learn and absorb the information at their own pace.

Concepts that were presented in video format were favoured. They found it useful to see individuals acting out workflows. It was noted that some found the videos repetitive as most workflows followed similar validation steps.

While election officials enjoyed the eLearning Modules, we found no significant change to the level of information retention when compared to more traditional paper-based learning. This was partly driven by the increased level of detail in each module which required additional focus and understanding from election officials.

**Recommendation 1**

In collaboration with the Corporate and Strategic Communications Department, determine the feasibility of creating an encompassing video training guide for election officials.
7.1.2. Focus on soft skills

Training was heavily focused on policy, and learning the hardware and software required to perform the various duties on Voting Day. However, feedback from all levels of election officials indicated the need to cover soft skills required to handle the challenges faced on Voting Day. Our analysis found that election officials were not well prepared to handle the stress associated with peak-hour voting.

Recommendation 2

We recommend the following soft skills be covered during training, either as eLearning Modules or as in-person training:

- Conflict resolution
- Time management
- Stress management
- Resource management

8. Voting Locations

8.1. Detailed Observations and Lessons Learned

8.1.1. Public feedback of transit voting locations was very positive

Election officials stationed at both transit voting locations received very positive feedback throughout the two Advance Vote days. Riders enjoyed the convenience of being able to vote enroute to work or home. Praise was received for the innovative concept and many riders wanted a wider adoption across other levels of governments.

8.1.2. Transit voting locations had mixed voter turnout

Limited information on ridership from the Toronto Transit Commission (TTC) for the new line extension was available at the time of commitment in March 2018. The administration could not make an informed decision in selecting one subway station over another. As such, both subway stations physically located in Vaughan were designated as voting locations.

In our analysis of the voter turnout at these two subway locations, we noticed a large discrepancy between the stations. Vaughan Metropolitan Centre (VMC) had 164 ballots cast and Highway 407 had 44 ballots respectively. Turnout at the two stations was found to be reflective of the type of commuter utilizing the stations.
1. VMC – primary used by Vaughan residents to access the TTC system.

2. Highway 407 – heavily used as a transiting point for residents of nearby municipalities due to its proximity to the 407 and access to out of town transit. As a result, most riders passing through this station were not eligible to vote in Vaughan.

**Recommendation 1**

To accommodate the expected increase in occupancy of nearby commercial and residential towers near the VMC Subway Station, it is recommended that a voting location be set up in the VMC Subway Station or in a nearby connected building.

**8.1.3. Pre-staged voting locations key to opening on time on Voting Day**

Locations with eight or more ePoll notebooks were set up by teams of volunteers led by Office of the Chief Information Officer (OCIO) resources the night before Voting Day. The set up included placement of all the furniture and electrical components. ePoll notebooks, scanners, printers, tabulators and supplies were removed overnight for security reasons.

We estimate that these locations saved on average 45 minutes of time by having their voting location staged the night before. MDROs at these locations stated that the two and a half hours allocated for set up would not have been enough if their locations were not pre-staged.

**Recommendation 2**

To reduce the workload on election officials setting up voting locations on Voting Day, all ePoll locations should be pre-staged using Election Ontario’s approach. In this approach, teams meet at their assigned voting location the day before Voting Day to set up. This is a great opportunity for teams to meet and reinforce the accountability for their roles. For this approach to be successful, the following additional changes will be required:

- Increase compensation to account for evening set up time, approximately 2 hours
- Negotiate no-cost access to voting locations the day prior to Voting Day for set up
- Determine feasibility of leaving equipment and supplies on-site with restricted access

**8.1.4. Collaboration between condo management teams needs improvement**

38 condo voting locations (47 unique condo towers) were used in the 2018 election, an 18.75% increase from 2014. All condo locations were secured in the first quarter of 2018 via Building Access Agreements signed by the condo management companies. In the negotiation process, it was discovered that many of the condos near one another are managed by different companies.
In other words, two connecting buildings could be managed separately and therefore have a different decision-making process.

While many management companies were willing to collaborate, some were not. As a result, separate voting locations had to be set up for connecting or very close by towers. This was a very inefficient use of resources, as the average voter turnout, cost and voter processed per staff was significantly lower in this type of voting location. (Figure 3). In addition, one voting location could have served multiple connecting towers by leveraging communal space.

**Figure 3: Average number of ballots cast, voters processed per staff and cost by type of voting location.**

**Recommendation 3**

To improve the use of resources, limit the number of condo voting locations to one per condo complex. Complexes with shared amenities and event space should only have one voting location setup for all residents.

**Recommendation 4**

We recommend the administrators facilitate discussions with management companies responsible for joint condo facilities to identify opportunities for collaboration.

**Recommendation 5**

An analysis on the long-term sustainability of hosting voting locations in condos should be conducted, considering the rapid development across the City.
8.1.5. Poor network connectivity in Kleinburg

Three voting locations in Kleinburg were used, Pope Francis C.E.S., Kleinburg P.S. and Ecole la Fontaine. Preliminary testing of the cellular network connectivity in the area indicated poor connectivity. However, due to the limited number of City-owned facilities and the rapid growth of the area, administration had to leverage any available space as a voting location. On Voting Day, it was repeatedly reported by election officials that the ePoll technology was slow to connect and expired synchronization issues.

Recommendation 6

We recommend these three facilities be reassessed prior to the next election to determine if any signal improvements were applied. If improvements have not been made, administration should consider the use of any City owned facilities as they have been or will be retrofitted with Wi-Fi.

Response from Office of the City Clerk

Pierre Berton Heritage Centre was used in-lieu of Kleinburg P.S. for the 2019 York Region District School Board by-election with great success. No connectivity issues were reported. This location has been included in the database of voting locations for consideration in future elections.

8.1.6. Accommodations required for Villa Giardino

Four towers located on Rutherford Road, collectively referred to as the Special Voting locations at Villa Giardino required additional attention. This voting location was re-introduced for 2018 after failing to secure the facility in 2014. Three of the towers are connected and one is a standalone. The towers are managed by two separate companies. As such, the special voting hours were separated to accommodate this existing arrangement. The voting team was scheduled to move from one tower to the other in two shifts. However, an error on the Voter Information Cards stating regular voting hours (10:00AM - 8:00PM) for only one of the towers forced the team to remain at one location. This resulted in one of the towers not having a voting location on-site as advertised. Although the building doors were unlocked to allow residents from the other tower to access the voting location, the confusion overshadowed the alternative arrangement. When the issue was identified, the supervisor posted signage on the afternoon location directing voters to the correct tower. A staff member was also posted at the door directing voters, minimizing the impact of the error.

Recommendation 7

To prevent similar errors in the future, the voting location dataset should be reviewed by at multiple points prior to the printing of the Voter Information Cards.
9. Logistics

9.1. Detailed Observations and Lessons Learned

9.1.1. Equipment rate of return surpassed expectation

One of the major logistical changes in this election was providing external staff with vital equipment such as tabulators and ePoll kits. This change was made to accommodate the external election officials hired in key positions such as MDROs and TDROs. In previous elections, equipment was deployed to internal staff only, assuming it bore a lower risk of damage or loss. However, all but a single power bar was returned. An additional 6 peripherals were found to be damaged. The equipment rate of return surpassed the administration’s expectations but more importantly disproved the assumption of having to rely on internal staff for equipment. This will offer more flexibility in future planning.

10. Ballots and Supplies

10.1. Detailed Observations and Lessons Learned

10.1.1. Ballot design is not intuitive

City of Vaughan introduced a new ballot design in the 2010 Municipal Election as part of a rebranding campaign and has been used since. Voters are required to “fill in the arrow” instead of marking the oval. This design was meant to reduce the risk associated with manually interpreting a ballot.

However, because of its unique design, voters were frequently puzzled on how to properly mark the ballot. In both provincial and federal elections, voters are instructed to mark an “X” or fill in the oval. At the polls, Vaughan voters expected consistency. Despite demonstrations by election officials on how to “fill in the arrow” on the ballots, voters continued to struggle to do it correctly. This issue was noted in previous elections and observed again in 2018.

It was particularly challenging for voters with hand tremors to draw the connecting line through the arrow. The ballot design had minimal room for error when detecting markings outside of the designated space. Special voting locations had a proportionally higher number of cancelled ballots, presumably because the need for manual dexterity to fill in the arrow is high. Voters at these locations required up to three or four attempts before marking the ballot correctly for the tabulator to accept it. This process was very time consuming and frustrating for both voters and staff. It also discouraged voters (particularly first-time voters) to participate in a process they expected to be simple.

Recommendation 1

We recommend redesigning the ballots to a format consistent with the provincial and federal ballots. That is, replacing the arrow with an oval to be filled in or marked with an “X.”
10.1.2. Positive reception to use of technology at voting locations

All voting locations not located in condos or special polls, were equipped with ePoll technology. The technology offered more accurate and timely service to voters. Election officials found the ability to scan voter information cards very useful, reducing the search time per elector. They also enjoyed the ability to complete forms electronically and having all changes reflected in real time.

Feedback was also received from voters regarding the use of technology in voting locations. Voters were pleased that their information could be found quickly, even when a voter information card was not presented. They also appreciated saving time on manually completing revision forms.

Although the general reception was positive, there were a few issues that arose from the use of technology in voting locations that should be noted. The learning curve some election officials experienced when polls opened caused voter processing times to spike – this was corrected as the day went on. It was also noted that the reliability of the printers and scanners also caused slowdowns throughout the day.

Recommendation 2

We recommend continuing the rental partnership with Elections Ontario (pending availability) for ePoll technology. This partnership was cost effective and provided adequate equipment for the needs of the municipality.

Response from Office of the City Clerk

The Office of the City Clerk worked collaboratively with the Tabulator vendor, Dominion Voting Systems to redesign the ballots for pilot in the 2019 York Region District School Board By-Election. The arrows were replaced with an oval, to be filled in or marked with an “X.” The new ballot design was very well received by both election officials and voters.

Response from Office of the City Clerk

The Elections Ontario Technology Sharing Program was leveraged for the 2019 York Region District School Board By-Election with continued success.
10.1.3. Printer related issues were the most common technology complaint

Access to a printer was crucial to a successful transition from paper to ePolls. It allowed revision forms to be completed and reflected in real time. It also allowed for on-site printing of additional signage and documentation.

A total of 15 printer related issues were logged for the voting period (six for Advance Vote and nine on Voting Day). The root cause of most of the issues were determined to be caused by the quality and speed of the printer.

1. **Printer overheating.** The printer heats up very quickly and retains heat for long periods of time. This led to overheating, which caused the printer to malfunction and shut down.

2. **Large volume printing.** More than 7,750 revisions were completed during the voting period, 74% were completed on Voting Day. The printers were not designed to handle large volume printing – the manufacturer's specifications indicate approximately 20 pages per minute. At large voting locations, up to 12 DROs were simultaneously printing, which exaggerated the issue.

3. **Automatic standby mode.** At smaller locations, slowness was not caused by large volume printing. Instead, the manufacturer’s setting to automatically standby the printer when not in used for a certain amount of time was the issue. The printers had a long recovery/restart time from standby mode, approximately two to three minutes. This was an issue during the slower afternoon hours, where revisions are less frequent.

All printers were tested during the configuration phase to ensure connectivity, proper alignment and printing. The factors that contributed to the reported issues experienced in the field, could not and were not replicated during testing.

The administration did not have direct control or influence over the printers used. The printers were part of the ePoll packages procured from Elections Ontario as part of the Sharing Program.

**Recommendation 3**

We recommend reducing the number of ePolls that are dependent on one printer. Larger locations should be equipped with at least two printers to allow for traffic to be diverted to the next available printer, minimizing wait times and reducing the probability of performance issues.

**Recommendation 4**

To further improve the voter experience, processes and policies should be updated to accept electronic signatures on revision forms. The technology to enable electronic signatures on the ePoll Notebooks is already available and compatible with the Voters’ List software.
11. Voter and Candidate Services

11.1. Detailed Observations and Lessons Learned

11.1.1. Alternative contact methods required

Over 175 calls were logged on the Election Central Voting Day logs. Data collected on the total number of calls received on the Election Central line shows a discrepancy of approximately 100 calls. The high volume caused calls to drop or callers to experience wait times upwards of 15 minutes. Internal MDROs and TDROs reached Election Central representatives through alternative methods such as text messaging, emails and calls to personal numbers.

In reviewing the logs, the alternative methods of contact were found to be used primarily for non-urgent questions or issues. It was a very effective way to share information, while remaining available on the main phone line. These methods also helped reduce the number of calls received, providing relief for both Access Vaughan and Election Central. These options were not officially advertised or encouraged and therefore were not equally available for all election officials.

Recommendation 1

We recommend introducing alternative methods to contact Election Central and report issues to provide flexibility to election officials. This should be supplemented with additional support in Election Central to monitor the alternative channels.

Response from Office of the City Clerk

A restructured Election Central support model was piloted for the 2019 York Region District School Board By-Election. Microsoft Teams was introduced as an alternative contact method for MDROs at voting locations. The existing corporate licenses were leveraged at no additional cost to the Elections project. Additional resources were trained to support questions and requests placed through Teams.

100% of the participating MDROs would recommend rolling out Teams as an alternative contact method for Election Central in future elections.

11.1.2. Minor changes to voter information packages would reduce inquiries

Voter information cards were delivered as a household package. Each package contained all the voter information cards for registered voters living at the address. The cover page was
redesigned for 2018 to include a downward arrow listing the number of voter cards in the package. Two voter information cards were printed per page, with a tear-off in between.

This was the second election in which voter information cards were distributed in this manner. Despite the redesigned cover page, voter inquiries regarding the packages remained extremely high. Over 500 calls were received beginning September 17 when cards were received in the mail. Approximately half of the calls were resolved by simply explaining how to use the voter information package, and that the number on the cover page should match the number of unique voter barcodes in the package – which indicates one unique voter card.

Recommendation 2
We recommend redesigning the voter information package to include separated, individual voter information cards. If financially feasible, voter information cards should be individually mailed out to emulate the other levels of government.

Response from Office of the City Clerk
The Office of the City Clerk worked collaboratively with the voter information card vendor, Gilmore DocuLink to redesign the voter information packages for the 2019 York Region District School Board By-Election. A cover page was still included in every package, but the voter information cards were individually printed.

A significant reduction in inquiries regarding missing voter information cards were received because of this change. Pending financial feasibility, the Office of the City Clerk intends to adopt this change for future elections.

11.1.3. Accuracy of the Voters’ List remains a challenge

The Municipal Property Assessment Corporation (MPAC) is responsible for providing municipalities with a Preliminary Voters’ List. Municipalities are then accountable for any subsequent data cleansing required to produce a final Voters’ List. The List provided by MPAC for the 2018 municipal election was particularly flawed. It contained a significant number of errors that should have been corrected in the previous election but were not reflected in the latest extract. For example, deceased electors (5+ years) remained on the Voters’ List despite requests in previous elections for their permanent removal.

The high error rate of the Voters’ List caused a multitude of downstream issues including:

1. Inaccurate voter information cards. Voters received cards for former residents, deceased family members or members whose names have changed. This process was not only costly to mail but frustrating for impacted households.

2. Incorrect statistics. The number of eligible voters was skewed due to the high number of errors (both from deceased and duplicate electors). This made it challenging to adequately plan for staffing at voting locations. It also skewed the voter turnout percentage as ineligible electors due to changes in address remained in the eligible
voter count. The administration does not have enough information to remove ineligible voters.

3. **High revision counts.** Over 7,750 revisions were processed during the 2018 voting period (2,000 for Advance Vote and 5,750 on Voting Day). Revisions are time consuming to perform as they require all voter information to be verified and updated. This process can take up to 5 minutes to complete – double the time required to process a non-revision voter. Majority of revisions were done during peak hours on Voting Day across the polls. This contributed to the processing delays and line-ups experienced in voting locations.

**Recommendation 3**
We recommend the ongoing maintenance of the municipality’s Voters’ List as a hedge to reduce any potential errors introduced by solely relying on MPAC’s Preliminary Voters’ List. This method would require the development of a platform and process to allow voters to continuously update their information.

**Recommendation 4**
In collaboration with other election administrators and organizations, advocate for changes to the source and accuracy of the Voters’ List to reflect a centralized database.

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### Response from Office of the City Clerk

The City Clerk / Returning Officer fully endorses the recommendations of the Chief Electoral Officer of Ontario contained in Election Ontario’s report on the 2018 Ontario General Election respecting the introduction of a single database for addresses in Ontario, and that Elections Ontario assume MPAC’s responsibility for municipal Voters’ Lists.

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**11.1.4. Voter education an ongoing opportunity**

Voter engagement, as measured by voter turnout percentage, is declining in Vaughan. This pattern is also observed across other municipalities and in municipal politics in general. Anecdotally, it was noted that questions signaling disengagement or misinformation was on the rise. Questions such as political affiliation of candidates, platforms and campaign information, differences between the three levels of government as well as general civic processes were asked more frequently than in previous years. Voter education and engagement were not in scope for the administration for 2018. However, there are benefits to developing educational campaigns leading up to the next municipal election in 2022.

**Recommendation 5**
We recommend the municipality to develop an ongoing education initiative focusing on the election process and the importance of civic engagement. Leading up to an election year, this initiative should be ramped up to prepare voters.

Recommendation 6

To better support candidates and members of the media with their role in educating voters, the administration should hold seminars on the roles and responsibilities of each Office.

11.1.5. Candidate Access Portal well received

Feedback received from candidates regarding the Candidate Access Portal were very positive. This is the first election in which this service was offered. It gave candidates real-time access to documentation, maps and the Voters’ List. Candidates were no longer required to request printed copies of Voters’ List, which would quickly become outdated at the start of Advance Vote. The ability to see in real-time which voters had cast their ballots (only for technology enabled locations) was helpful in coordinating campaign efforts. Candidates who wished to have physical printed copies, were able to request it at the Office of the City Clerk for a fee.

It was noted that candidates and their campaigns had varying levels of technology proficiency. Some candidates required a lot more support from the administration to navigate the Portal. All candidates were given a high-level walk through of the Portal during their nomination meeting. Additional documentation on how to use the tool was also provided via email in August 2018.

Recommendation 7

We recommend continuing the use of the Candidate Access Portal in future elections as a tool to provide up to date information to candidates.

Recommendation 8

We recommend the administration in collaboration with the vendor, develop video tutorials on how to navigate the Candidate Access Portal to assist candidates in maximizing the tool’s potential.