City of Kingston
Information Report to Council
Report Number 19-165

To: Mayor and Members of Council
From: John Bolognone, City Clerk
Resource Staff: Same
Date of Meeting: June 18, 2019
Subject: City of London Experiences with Ranked Choice Voting

Executive Summary:

On November 15, 2016, Council directed the City Clerk to monitor the use of ranked ballot elections throughout Ontario for the 2018 election and report back to Council in 2019 with respect to the experiences of other jurisdictions that used ranked ballot voting. The City of London was the only municipality to use ranked ballot voting in 2018. On December 18, 2018 Council passed a motion requesting staff to provide a report on the experiences of the City of London by the end of Q2 2019 and that said report provide a high level analysis that can assist in the implementation of ranked ballot voting in the City of Kingston.

Staff has reviewed the report from London’s City Clerk which provided an update with respect to the 2018 election. Staff also attended the 2019 Municipal Clerks Forum in Mississauga at which London staff presented information on London’s experience with ranked ballots and had further discussions with London staff and Dominion Voting Systems (Dominion) to obtain further information included in this report.

With respect to London’s experiences with ranked choice voting, the following key observations are noted:

- A main challenge for London was communicating with and educating the public to ensure that candidates and the community were aware of the change in the voting process - A member of London’s communications staff was seconded and dedicated solely to the election for one year;

- Another challenge was training all election workers so that they could explain clearly how ranked choice voting worked - Additional election workers were hired to ensure that the voting places were adequately staffed;

- Separate call centres were provided on voting day for election workers and the public;
Another main challenge was the absence of proven technology for voting equipment to conduct a ranked ballot election in Ontario;

- London retained an independent auditor with expertise in ranked ballot elections to ensure the accuracy and integrity of the 2018 election;
- London did not provide an internet voting option with the ranked ballot election;
- On election night (October 22, 2018) only the first choice votes were tabulated – eight of the 15 races were decided on the first ballot count;
- For the remaining seven races, additional rounds of ballot counting commenced at 10 a.m. on October 23, 2018 and all unofficial results were posted by 3 p.m.;
- The use of ranked choice voting did not change the outcome of the election in terms of the winning candidates - The winning candidate in all 15 races would have been the winning candidate had the election been a first-past-the-post election;
- Switching to ranked choice voting did not increase elector turnout in London; and
- London’s 2014 election cost was $1,321,056 and the 2018 election cost was $1,779,149 of which the total additional cost related to the ranked ballot election was $515,446.

London’s successful ranked ballot election means that Kingston will not face all of the same challenges should Council decide to pass a ranked ballot election by-law for the 2022 municipal election. Staff is generally satisfied that the technology and software to conduct a ranked ballot election exists, particularly with respect to in-person voting. London did not offer an internet voting option in 2018 but based on discussions with Dominion, internet voting is possible in a ranked ballot election. Staff is of the opinion that since a municipal ranked ballot election with an internet voting option has not previously been undertaken in Ontario, it may be necessary to retain an independent auditor with experience in ranked ballot elections to verify the processes, procedures and accuracy of the internet voting option.

Similar to London, two of the biggest challenges facing Kingston will be: communication and public education to ensure that candidates and the electorate understand ranked ballot voting and are aware of the change in the voting process; and, training all election workers so that they can explain clearly how ranked ballot voting works. In terms of an updated cost estimate for the initial ranked ballot election, staff estimate additional costs of almost $300,000, which would be contingent on vendor selection, selection of the independent auditor for internet voting, the number of choices, final ballot design, any required upgrades to the City’s IT infrastructure, and the approved public engagement strategies. A more refined cost estimate will be prepared and finalized for presentation to the public and Council prior to Council’s consideration of a ranked ballot election by-law.

With Council direction to initiate the process to implement ranked ballot voting for the 2022 election, updated information on ranked ballot voting has been posted on the elections webpage together with a Frequently Asked Questions document. Staff has prepared a work plan in order to implement ranked ballot voting and over the coming months staff will work with Communications to develop an initial public engagement strategy that will focus on the period up to Council making a decision on whether or not to pass a ranked ballot election by-law. In
addition, staff will begin to compile the required information that must be presented to Council and the public with respect to such matters as: how a ranked ballot election would be conducted; the costs of conducting the election; the voting equipment and vote-counting equipment being considered; and, any alternative voting method being considered (e.g. internet voting).

Recommendation:

This report is for information only.
Consultation with the following Members of the Corporate Management Team:

Gary Dyke, Commissioner, Corporate Enterprise Services
Not required

Peter Huigenbos, Acting Commissioner, Community Services
Not required

Jim Keech, President & CEO, Utilities Kingston
Not required

Desirée Kennedy, Chief Financial Officer & City Treasurer
Not required

Sheila Kidd, Commissioner, Transportation & Public Works
Not required
Options/Discussion:

Purpose

This report provides information to Council with respect to the experiences of the City of London with ranked choice voting during the 2018 municipal election and provides a high level analysis that can assist in the implementation of ranked ballot voting in the City of Kingston.

Background

On November 15, 2016 Council received Report Number 16-366 that provided information with respect to ranked ballot elections. At that meeting Council passed a motion directing the City Clerk to:

“monitor the use of ranked ballot elections throughout Ontario for the 2018 municipal election and report back to Council in 2019 with a report that outlines the experiences of other jurisdictions that used ranked balloting in their 2018 municipal election”.

The City of London was the only municipality to use ranked choice voting in 2018. The City of Cambridge also had a referendum question on its 2018 election ballot.

On November 20, 2018 Council received information Report 18-384 which provided a summary of the results of the referendum question on the 2018 election ballot with respect to ranked ballot voting. The report also outlined the legislated process that would have to be followed should Council decide to initiate the process to implement ranked ballot voting for the 2022 municipal election.

On December 18, 2018 Council passed the following motion:

**Therefore Be It Resolved That** staff be requested to initiate the process to implement Ranked Ballot Voting to elect the Mayor and District Councillors in the 2022 municipal election recognizing that the required Ranked Ballot Voting By-law would have to be passed by May 1, 2021; and

**That** staff be requested to provide a report on the experiences of the City of London to Council by the end of Q2 2019 and that said report provide a high level analysis that can assist in the implementation of Ranked Ballot Voting in the City of Kingston.

Staff had some initial discussions with the City of London in 2018 with respect to the matter of additional costs for conducting a ranked ballot election. At that time, London had not compiled a final accounting of the costs that could be attributed to ranked choice voting. London’s City Clerk prepared a report to London’s Corporate Services Committee providing an update on the 2018 municipal election. Staff has reviewed that report and also attended the 2019 Municipal Clerks Forum at which London staff presented information on London’s experiences with ranked ballots and has communicated further with both London’s City Clerk and the City’s supplier of vote tabulators (Dominion) to obtain additional information contained in this report.
Discussion

The key aspects of the London report that relate specifically to ranked choice voting and that may be of assistance to Kingston in implementing ranked ballot voting are summarized in the following sections.

Overall Election Administration

As noted in the London report, the 2018 municipal election required approximately two years of preparation. In London, the elections team included staff from the Clerk’s Department as well as staff leads from areas essential to the administration of the municipal election. The London elections team started meeting weekly early in 2017 to coordinate, plan and implement all aspects of the election, including significant time with the vendor selected to provide the ranked ballot voting equipment and technology. A significant amount of time was also spent preparing and implementing enhanced communication protocols for the 2018 election.

Similar to London, Kingston’s 2018 municipal election was administered by the City Clerk and the elections team included staff from other areas essential to the administration of the municipal election (e.g. IT and Communications). Initial election planning began in October, 2017 together with the implementation of the public engagement strategy with respect to the referendum question on ranked ballot voting. Regular bi-weekly meetings of the election team (Clerk’s Department and Communications) commenced in February, 2018. These became weekly meetings between August and October. Weekly meetings of the Election Technology Project Team (Clerks Department and IT) commenced in May, 2018.

Staff has prepared a proposed work plan with respect to the implementation of ranked ballot voting in Kingston. Based on this work plan, staff would need to start compiling the information required by the Municipal Elections Act and Ontario Regulation 310/16 early in 2020. By the end of Q3 2020, a public engagement strategy would be prepared and implemented with respect to ranked ballot voting. Required open houses would be scheduled in Q4 2020 and the required statutory public meeting would be held in Q1 2021 to enable Council to make a decision on a ranked ballot election by-law by the May 1, 2021 deadline. If the By-law is passed, the election team would immediately begin the detailed planning for the 2022 municipal election.

Communication and Elector Engagement

One of the main challenges for the City of London was communicating with and educating the public to ensure that candidates and the community were aware of the change in the voting process. The London report identified the importance of providing sufficient information about ranked choice voting so that candidates and the electorate could be fully engaged in the process. London’s elections team held two candidate information sessions, attended over 160 community events between March and September, 2018 and conducted demonstrations for the media. An enhanced communication effort through the media, the City’s website, billboards and bus advertisements throughout the City was undertaken with the assistance of a member of the City’s communications staff who was seconded and dedicated solely to the election for one year. The report also noted that the communication protocols for the 2018 election were very labour intensive, with all elections staff and all managers in the Clerk’s office working evenings.
and weekends attending events, including festivals, community meetings and meetings of organizations. According to the updated costs specifically related to the ranked ballot election, London spent $202,108 on consultation, an increase of approximately 33% more than the initial 2017 estimate of $150,000.

Part of London’s communications plan specifically addressed how results would be reported and released, recognizing that the results would be released much later and in a different format from a first-past-the-post election. London’s elections team met with the media to provide detailed information on what to expect on election night and the day after. In addition, staff increased their presence on social media platforms throughout the vote counting process to update the media and the public on what was happening and what to expect. The information sessions held by the elections team throughout the community in the months leading up to the election also addressed the timing of the release of election results.

In terms of the success of London’s communications plan, the report noted: “We believe, based on the response from the elector at the Polls that generally speaking the public understood there was a change in the election process, with most electors (based on our analysis of the Mayor’s race) choosing to rank their candidates”.

Communicating with and educating the public will also be a key consideration in Kingston, both before Council decides to pass a ranked ballot election by-law and afterwards if the by-law is passed. Some public education and communication was undertaken prior to the 2018 election (Report 17-192) to ensure that the electorate was aware of the referendum question, how a ranked ballot election would work and how much the election would cost. A total of eight (8) public open houses were held (4 in January 2018 and 4 in September, 2018). In addition to the open houses, staff met with a few community groups and also utilized the City’s website, signage, print media, social media, news releases and a video to explain how a ranked ballot election would work and how the votes would be distributed based on the rankings on each ballot. The public education campaign, which had a budget of $25,000, continued up to Voting Day on October 22, 2018. Notwithstanding the approved public education/communications strategy, a number of election staff reported that on voting day there were numerous electors asking about ranked ballot voting and indicating that they had not heard anything about ranked ballot voting. This suggests that a much more robust public education/communications strategy will be required moving forward with the implementation of ranked ballot voting. Staff indicated at the open houses and at the meetings with community groups prior to the 2018 election that if Council decided to implement ranked ballot voting a more substantial budget for public consultation would be required and an initial high level estimate of $75,000 was provided.

With Council direction to initiate the process to implement ranked ballot voting for the 2022 election, staff has already prepared some items for public education including updated information on ranked ballot voting that has been posted on the elections webpage together with a Frequently Asked Questions document. Staff has also prepared a proposed work plan in order to implement ranked ballot voting. The work plan proposes two public education/communications strategies. While components of the strategies will be the same, each strategy, to be prepared in consultation with Communications, will have a different focus. The first strategy will focus on the period up to Council making a decision on whether or not to pass a
ranked ballot election by-law. A key component of this strategy will be the provision of required information to Council and the public with respect to:

- A detailed description of how the election would be conducted and how the votes would be distributed to candidates based on the rankings marked on the ballots;
- An estimate of the costs of conducting the election;
- A description of the voting equipment and vote-counting equipment being considered; and
- A description of any alternative voting method being considered (e.g. internet voting).

If Council passes a ranked ballot election by-law, the second public education / communications strategy would focus on the period up to and including voting day. The key message of this strategy would be that the method for electing the Mayor and Councillors in Kingston has changed. Key components would include ensuring that candidates and electors understand how ranked ballot voting works, how the votes are redistributed in each round of ballot counting and expectations for the release of election results on election night. Staff is estimating that the public education / communications strategies would cost $100,000 or more. This estimate would be refined as part of the required information to be provided to Council and the public prior to Council passing a ranked ballot election by-law.

**Voting Periods and Locations**

The 2014 London election had 166 voting day polls and 12 advance polls. The number of voting day polls was increased in 2018 to 199 (20% increase) in order to accommodate both population growth and the potential for longer wait times with the introduction of ranked choice voting (the Clerk in London indicated that wait times at the voting places for the 2018 election were about the same as in 2014). London conducted a vote-anywhere advance vote on October 4th and from October 6th to 13th for a total of seven advance vote days held at 12 unique voting places across the City. New for 2018, two advance voting places were held at two hospitals on October 11th. An additional earlier advance vote day was held on October 4th so students at Western University could vote prior to the start of reading week.

In 2018, Kingston had one advance voting day (October 13th) with one voting place in each of the 12 electoral districts. On voting day, there were a total of 25 voting places, two in each electoral district except Countryside which had three. In addition, on voting day there were 17 dedicated voting places in various institutions, nursing homes and retirement residences for the residents of those buildings only. As part of the planning for the 2022 election, Kingston’s elections team will be discussing various options in terms of the number of voting places on voting day and the number of advance voting days. A Council decision to pass a ranked ballot election by-law is not expected to result in the need to increase the number of voting places but will definitely impact the number of election workers at each voting place.

**Voting Technology and Service Provider**

Another of London’s biggest challenges was the absence of any proven technology for voting equipment to conduct a ranked ballot election in an Ontario legislative context. London
commenced an open and public Request for Qualifications (RFQ) in July, 2017. The RFQ sought interested qualified consultants to provide for a fully managed (hardware/software) turnkey election management solution which would include ranked choice vote tabulation capabilities, election management software, in-poll tabulation for voting day and associated support for the 2018 municipal election. Upon closing of the RFQ, there were no interested vendors.

As a result, the City of London requested informal demonstrations of hardware and software capabilities from vendors that had previously partnered with the City. Only Dominion responded and at the end of that process was awarded the contract to provide the vote tabulation system and election software for the 2018 municipal and school board elections. The contract with Dominion included, among other matters, a Ranked Ballot Module Licence, the provision of vote count tabulators and software complete with an algorithm to count the ballots in accordance with provincial regulations, and professional support and services.

As London was the first municipality in Ontario to implement ranked choice voting, London decided to hire an independent auditor with expertise in ranked ballot elections to ensure the accuracy and integrity of the 2018 election. Hiring an auditor was deemed appropriate and necessary given that there are no federal or provincial standards to test voting and vote-counting equipment in Canada and provincial government representatives indicated to London that the province would not be involved in certification of the algorithm to conduct a ranked ballot vote. Certification would have given London some reassurance being the first municipality to run a ranked ballot election in Ontario.

The Florida-based auditor that was hired had expertise in testing and evaluating ranked ballot voting elections and software. The evaluation included:

- reviewing the processes and procedures (including a mock election and functional test of the ranked ballot voting system);
- evaluating the Dominion ranked choice voting tabulation in accordance with Ontario legislation;
- assisting with both acceptance and a logic and accuracy testing for tabulators and software; and
- observing tabulation and conducting a post-election evaluation.

Through extensive testing and review, it was determined that Dominion’s ranked choice voting system produced accurate results data and the tabulation procedures were appropriate and adequate to determine official winners.

Kingston will not be facing the same degree of challenge with respect to voting technology given the success of the London ranked ballot election. Dominion is the City’s current provider of vote tabulation equipment. Based on preliminary discussions with Dominion, staff is confident that the necessary vote counting equipment and associated software will be available for the 2022 election should Council pass a ranked ballot election by-law. Staff is of the opinion that hiring an independent auditor to test and evaluate the procedures and vote tabulation equipment for
casting ballots at the voting places will not be required. The necessary logic and accuracy testing can be undertaken by staff and the service provider.

**Internet Voting**

The City of London did not provide an internet voting option during the 2018 election. London had not used internet voting in any previous elections.

Kingston provided an internet voting option in both the 2014 and 2018 municipal elections. There was an increase in the use of internet voting in 2018 and staff will be proposing that internet voting be an option in the 2022 election as well. In discussing this matter with Dominion it was indicated that Dominion has provided an internet voting option in other ranked ballot elections. On that basis, it appears that an internet voting option for a ranked ballot election in Kingston could be accommodated. If an internet voting option is provided as part of a 2022 ranked ballot election in Kingston this may be a first in Ontario and, as such, the elections team would likely recommend the hiring of an independent auditor to evaluate the internet voting system to ensure compliance with Ontario legislation and to assist with the logic and accuracy testing.

**Accessible Voting**

The City of London provided electors with the opportunity to vote by proxy or to vote by mail. Vote by mail provided electors with the ability to mark their ballot from home at their convenience. If an elector was unable to complete the vote by mail process on their own, elections staff scheduled home visits where, upon request, a ballot was provided to the elector to mark in their home and given to the staff member to return to the drop-off centre. An accessible ballot-marking device was provided at all advance voting places for independent voting via “sip-and-puff”, rocker paddles or a tactile device (3 electors used the accessible ballot marking device). The ballot design was reviewed to increase legibility and Braille Ballot instructions were distributed to all voting places. All election workers were given accessibility training and all candidates were provided with accessible campaign guidelines and materials.

Kingston provided accessible voting equipment at all voting places on both the advanced voting day and voting day. In total, there were five (5) votes cast using the accessible voting equipment. No votes were cast using the accessible voting equipment on Advance Voting Day. On Voting Day, the accessible voting equipment was used at only three (3) of the twenty-five (25) voting places. In addition, on voting day there were 17 dedicated voting places in various institutions, nursing homes and retirement residences for the residents of those buildings only. All election workers were given accessibility training and accessible campaign guidelines and materials for candidates were posted on the elections webpage.

As noted in [Report 19-037](#), the Elections Team will be consulting with the Municipal Accessibility Advisory Committee well in advance of the next municipal election to investigate options for providing accessible voting opportunities in a manner that is both fiscally responsible and that will ensure that electors are provided with the assistance that may be required to enable them to cast a ballot privately and independently.
Results Tabulation

At the close of voting, all tabulators from the 199 voting places in London were returned to City Hall by 9:30 p.m. Elections staff then began the process of uploading the results from the memory cards in the tabulators. As each memory card was uploaded, the number of ballots included in the upload was verified against the results tape from the tabulator. All memory cards were uploaded by 11:30 p.m. and transcribed manually to the website. Staff completed the first round results and the school board results by 1:30 a.m. Election staff then determined if any candidate in any race had met the threshold of 50% plus one of the total votes. The Clerk was able to declare unofficial winners on election night in eight of the 15 races based on the first-choice vote totals. In the remaining seven races, additional rounds of ballot counting were required. On election night only the first choice results were tabulated.

On October 23 at 10 a.m. elections staff began the subsequent rounds of vote counting for the seven races that had not been determined on election night. The results were printed for each race and delivered to the City Clerk where they were proofed one more time before the winner was declared and posted on the City’s website. All unofficial results were published by approximately 3 p.m. on October 23. On October 29 the official election results were posted by the City Clerk.

For Kingston’s 2018 municipal election, once voting closed at 9:15 p.m. elections staff at City Hall uploaded the results from the advance voting day and the designated voting place tabulators. The Site Supervisor at each voting place uploaded the results remotely for their voting place. The unofficial results were posted about 10:15 p.m. on election night and the certified election results were posted on October 24.

Dominion has confirmed that remote uploading of the election results from each voting place would be possible with a ranked ballot election. On that basis, staff anticipates that for a ranked ballot election in Kingston, all unofficial results would be posted on election night recognizing that it will take longer to display the results depending on the number of rounds of ballot counting that are required.

London’s Ranked Ballot Voting Results

London’s official 2018 election results were posted on October 29. The results for each race showed the names of the candidates, the total votes cast, the threshold to win (50% plus 1), the number of rejected ballots, the number of blank ballots, the number of exhausted ballots and the number of over-votes. In each round of ballot counting the eliminated candidate was highlighted together with the number of continuing ballots, the vote change from the previous round and the new total number of votes for each remaining candidate. In all 15 races the candidate who was leading after the first round of ballot counting ended up being declared the winner. The use of ranked choice voting did not change the outcome of the election in terms of the winning candidates.

In London there were 14 candidates for Mayor and the number of candidates for Ward Councillor ranged from a high of nine to a low of two. In the eight Wards that were decided on the first ballot count the number of candidates ranged from a high of six to a low of two and the
winning candidates received a low of 50.54% of the vote to a high of 75.18% of the vote. In the race for Mayor and the other six wards the number of rounds of ballot counting ranged from three to 14. In each case, the candidate who was leading after the first round of ballot counting ended up being declared the winner. In fact, the candidate leading after the first round was also the leader after each subsequent round of ballot counting in all of the races. The following table shows the number of rounds of ballot counting in each of the seven races requiring multiple ballot counts, the winning candidate’s votes after the first round of ballot counting and the lead over the second place candidate, and the winning candidate’s final vote total and margin of victory.

<table>
<thead>
<tr>
<th>Race</th>
<th>Rounds of Ballot Counting</th>
<th>Total Votes After 1st Count</th>
<th>Lead</th>
<th>Final Total Votes</th>
<th>Margin of Victory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mayor</td>
<td>14</td>
<td>33,281</td>
<td>11,673</td>
<td>57,614</td>
<td>26,549</td>
</tr>
<tr>
<td>Ward 5</td>
<td>6</td>
<td>3,120</td>
<td>461</td>
<td>4,741</td>
<td>923</td>
</tr>
<tr>
<td>Ward 8</td>
<td>9</td>
<td>2,348</td>
<td>262</td>
<td>3,823</td>
<td>919</td>
</tr>
<tr>
<td>Ward 9</td>
<td>3</td>
<td>4,498</td>
<td>2,143</td>
<td>4,950</td>
<td>2,344</td>
</tr>
<tr>
<td>Ward 12</td>
<td>5</td>
<td>2,763</td>
<td>913</td>
<td>3,403</td>
<td>969</td>
</tr>
<tr>
<td>Ward 13</td>
<td>8</td>
<td>1,668</td>
<td>107</td>
<td>2,804</td>
<td>618</td>
</tr>
<tr>
<td>Ward 14</td>
<td>4</td>
<td>2,044</td>
<td>187</td>
<td>3,370</td>
<td>848</td>
</tr>
</tbody>
</table>

In the 2018 municipal election in Kingston there were four candidates for Mayor and the number of candidates for District Councillor ranged from a high of six to a low of two. If the 2018 election had used ranked ballot voting, and assuming that everyone voted the same way as their first choice vote, the races for Mayor and seven District Councillors would have been decided on the first ballot count. In those races the number of candidates ranged from a high of six to a low of two and the winning candidates received a low of 50.98% of the vote to a high of 80.43% of the vote. In Pittsburgh District the winning candidate was acclaimed.

The races for the other four District Councillors would have required multiple ballot counts as the winning candidates in those four districts received a low of 41.64% of the vote to a high of 49.79% of the vote. Each of those districts is summarized as follows with a hypothetical comment as to whether or not subsequent rounds of ballot counting would have changed the result:

Countryside District: There were three candidates, including the incumbent, running in this district, so only one additional round of ballot counting would have been possible. The winning candidate (incumbent) received 41.64% of the vote and had a margin of 91 votes over the second place candidate. In order to achieve the threshold of 50% plus 1 of the votes, the winning candidate would have needed 235 votes in the second round of ballot counting. With the potential for 561 transferrable votes from the third place candidate, the final result could have changed.
Loyalist-Cataraqui District: There were four new candidates running in this district and there would have been the potential for two additional rounds of ballot counting. However the winning candidate received 49.79% of the vote and had a margin of 666 votes over the second place candidate. In order to achieve the threshold of 50% plus 1 of the votes, the winning candidate would have only needed seven votes in the next round of ballot counting. On that basis, it is likely that only one additional round of ballot counting would have been required and the result in terms of the winning candidate would have been unchanged.

Trillium District: There were four new candidates running in this district and there would have been the potential for two additional rounds of ballot counting. The winning candidate received 42.49% of the vote and had a margin of 259 votes over the second place candidate. In order to achieve the threshold of 50% plus 1 of the votes, the winning candidate would have needed 267 votes in the second round of ballot counting or about 75% of the potential 356 transferrable votes from the fourth place candidate. On that basis, a third round of ballot counting would likely have been required and the final result in terms of the winning candidate may have changed.

Kingscourt-Rideau: There were three candidates, including the incumbent, running in this district, so only one additional round of ballot counting would have been possible. The winning candidate received 45.20% of the vote and had a margin of 319 votes over the second place candidate. In order to achieve the threshold of 50% plus 1 of the votes, the winning candidate would have needed 107 votes in the second round of ballot counting or about 20% of the potential 533 transferrable votes from the third place candidate. Recognizing that the winning candidate was the incumbent, the final result would likely not have changed.

**Did Ranked Ballot Voting Increase Elector Turnout in London?**

Switching to ranked ballot voting did not increase elector turnout in London, as shown by the following statistics:

- Total ballots cast in 2018 – 97,947;
- Total ballots cast in 2014 – 111,937;
- Total ballots cast in 2010 – 104,593.

**Ranked Choice Voting Outcomes and Analysis in London**

The London report also provided some statistical analysis for the Mayoral race to provide some insights into the behaviour of electors as it relates to ranked choice voting and which is shown in the following table:

<table>
<thead>
<tr>
<th>Candidates Ranked</th>
<th>Vote Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranked 1 Candidate / Choices 2 &amp; 3 Blank</td>
<td>29,428</td>
<td>31%</td>
</tr>
<tr>
<td>Ranked 2 Candidates / Choice 3 Blank</td>
<td>21,534</td>
<td>22%</td>
</tr>
<tr>
<td>Ranked 3 Candidates</td>
<td>45,476</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96,438</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
The report also provided an analysis of the “non-transferable” or exhausted ballots. A ballot is “non-transferable” in the first round if the entire contest is blank (i.e. no choices selected) or if there is an over-vote so that it is impossible to determine which candidate the elector ranked as the highest. An over-vote occurs when an elector selects more than one candidate for the same choice or rank. The tabulators were not pre-programmed to reject over-votes, under-votes or blank ballots. Any proper marks on ballots with over-votes and under-votes were counted. Ballots without the initials of an election official were rejected. A summary of the over-votes is shown in the table below:

<table>
<thead>
<tr>
<th>Over-Votes in Mayoral Race</th>
<th>Vote Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-votes in Rank 1</td>
<td>859</td>
</tr>
<tr>
<td>Over-votes in Rank 2</td>
<td>166</td>
</tr>
<tr>
<td>Over-votes in Rank 3</td>
<td>42</td>
</tr>
<tr>
<td>Total Over-Votes</td>
<td>1,067</td>
</tr>
</tbody>
</table>

In total, blank ballots and over-votes in the first rank represented 1.33% of the total votes cast for Mayor.

<table>
<thead>
<tr>
<th>Ballot Type</th>
<th>Vote Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank Ballots</td>
<td>442</td>
<td>0.45%</td>
</tr>
<tr>
<td>Over-votes in Rank 1</td>
<td>859</td>
<td>0.88%</td>
</tr>
<tr>
<td>Total Continuing Ballots</td>
<td>96,646</td>
<td>98.67%</td>
</tr>
<tr>
<td><strong>Total Votes Cast for Mayor</strong></td>
<td><strong>97,947</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

For Kingston’s 2018 election, the tabulators were pre-programmed to reject ballots that did not have the initials of the Site Supervisor or ballots that could not be read due to ambiguous marks or damage. The tabulators were also pre-programmed to provide warning messages in the case of blank ballots, over-votes or under-votes and the elector was afforded the opportunity to amend their ballot or mark a new ballot. If the elector wanted their ballot cast as marked (i.e. blank or with an over-vote or under-vote), the machine operator could override the warning message and cast the ballot. Any valid marks on the ballot would still be counted. It is anticipated that if Council decided to implement ranked ballot voting the tabulators would be pre-programmed in the same fashion in order to minimize the number of “non-transferable” or exhausted ballots.

**Ranked Ballot Election Cost Analysis**

As outlined in [Report 18-062](#), London’s 2017 estimate for the additional cost associated with a ranked ballot election was $322,500. The additional cost was comprised of the following components:

- Consultation $150,000;
Paper Ballots $ 42,500 (48% increase);
Vendor Cost $ 10,000;
Election Staff Resources $ 70,000 (35% increase); and
Additional Poll Workers $ 50,000 (1 additional worker at each poll).

The above costs were based on the number of candidates in the 2014 election, ranking a maximum of three candidates and a legal sized ballot printed double-sided. Also, it was acknowledged that there were unknowns with the reporting algorithm software for Ontario municipal elections and vendors were unaware of what it would look like and that it could be different for each municipality. The foregoing costs did not include algorithm development and testing.

The March 2019 London report included an update on the election costs. In terms of overall election costs, the report noted that the 2014 election cost was $1,321,056 and the 2018 election cost was $1,779,149. The increase in cost was attributed to ranked ballot voting, rising supplier costs, an increase in the number of vote tabulators to meet the demands of a growing population, as well as an increase in the temporary staff complement in the Elections Office. With respect to the additional costs specific to the ranked ballot election compared with the estimates provided in 2017, the report noted that the updated cost was a total of $515,446 comprised of the following:

- Consultation $202,108 ($141,108 in 2018);
- Tabulators $16,900 (13 additional tabulators)
- Paper Ballots $12,500;
- Auditor $147,752 (verified processes, procedures, and tested the algorithm)
- Vendor Cost $12,000;
- Staff Resources $82,686; and
- Poll Workers $41,500 (1 additional worker at each voting place on voting day – Elections Office staff were assigned to the polls on the advance voting days).

A significant component (29%) of the additional costs resulted from London’s hiring of an independent auditor with expertise in ranked ballot elections to ensure the accuracy and integrity of the 2018 election.

In terms of the additional costs associated with a ranked ballot election in Kingston, staff initially provided a high level estimate of $250,000 to $300,000. Based on London’s 2017 cost estimates and an estimated 20% increase from the City’s current supplier of election equipment, the following revised estimates were provided to Council:
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- **Contracted Services** $45,000
  (included vote tabulators, ballots, software license, internet voting, accessible voting equipment)

- **Election Staffing** $60,000
  (included one additional “senior” election official and one additional worker at each voting place on advance voting day and voting day)

- **Election Staff Training** $25,000
  (approximately 225 election staff would need training on ranked ballot voting)

- **Public Education / Consultation** $75,000
  (more in-depth and detailed than the consultation on the referendum question on the ballot)

- **Election Administration** $15,000
  (preparation of prescribed information for Council/public, open houses, public meeting, Council reports, etc.)

- **TOTAL** $220,000

Similar to London, these costs were considered preliminary and contingent on vendor selection, number of choices, final ballot design and the reporting algorithm development and testing. In addition, the foregoing costs did not include any required upgrades to the City’s IT infrastructure.

Staff has had further discussions with Dominion and it was confirmed that the addition of ranked ballot voting in Kingston would increase Dominion’s costs by 21.6% above the 2018 price (subject to conditions as discussed below). The increased costs would include the addition of the ranked ballot module, an increase in the internet voting price to cover the ranked ballot functionality and an increase in the implementation services labour given the additional effort required to implement ranked ballot voting. Dominion indicated that there should be no increase in the paper ballot pricing if the standard, single-sided legal size ballot is used (Dominion provided a sample ballot showing both ranked ballot voting for Mayor and Councillors and first-past-the-post for School Board Trustees).

Dominion’s price for the 2018 municipal election was $190,776. With the addition of ranked ballot voting, Dominion’s total cost (based on 2018 quantities) would be $260,589 (36.6% increase). However, if the City extended the existing contract with Dominion to cover the 2022 election (as was the case in 2018), Dominion could continue to provide similar advantageous pricing along with a substantial discount derived from the 2014 RFP. This would result in a total additional cost of $231,924 (21.6% increase).

Based on the foregoing, the estimated additional costs for the initial ranked ballot election in Kingston would be:

- **Contracted Services** $41,500
  (includes vote tabulators, ballots, software license, internet voting, accessible voting equipment, logic and accuracy testing, ballot boxes)
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- **Independent Auditor** $50,000
  (to verify the processes, procedures, and accuracy of the internet voting option for a ranked ballot election)

- **Election Staffing** $65,000
  (includes one additional “senior” election official and one additional worker at each voting place on advance voting day and voting day)

- **Election Staff Training** $25,000
  (approximately 225 election staff would need training on ranked ballot voting)

- **Public Education / Consultation** $100,000
  (more in-depth and detailed than the consultation on the referendum question on the ballot)

- **Election Administration** $15,000
  (preparation of prescribed information for Council/public, open houses, public meeting, Council reports, etc.)

- **TOTAL** $296,500

These costs are considered preliminary and would be contingent on vendor selection, selection of the independent auditor for internet voting, the number of choices, final ballot design, any required upgrades to the City’s IT infrastructure and the approved public engagement strategies. A more refined cost estimate will be prepared and finalized for presentation to the public and Council prior to Council’s consideration of the Ranked Ballot Election By-law.

**Existing Policy/By-Law:**

The *Municipal Elections Act, 1996*, as amended

Ontario Regulation 310/16, Ranked Ballot Elections

**Notice Provisions:**

None.

**Accessibility Considerations:**

None.

**Financial Considerations:**

There are no financial considerations associated with this report. However, it is noted that future municipal elections will be more costly for the taxpayers of the City if Council decides to implement ranked ballot voting. The additional costs are estimated to be $296,500 or more for the initial ranked ballot election. A more refined cost estimate must be provided to Council and must be made available to the public prior to Council passing the required Ranked Ballot Voting By-law.
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Exhibits Attached:
None.