# City of Guelph Report on Remote Electronic Voting Options

Nicole Goodman, PhD

July, 2013

# **Table of Contents**

Note to the Reader	3
Executive Summary	
Introduction	
Who took part in the poll?	
Potential public use of remote Internet or telephone voting methods	
Potential impact on voter participation	11
Access to and confidence in the technology	13
Conclusion	15

# **Note to the Reader**

This report was prepared by Nicole Goodman, PhD. Nicole is a Post-Doctoral Fellow at the Innovation Policy Lab in the Munk School for Global Affairs at the University of Toronto. The survey instrument was jointly developed by the City of Guelph with input from Nicole and Oraclepoll. The polling firm, Oraclepoll, provided the data collection and preliminary analysis. Special thanks to Carleton University Professor Jon Pammett for his survey comments and advice.

# **Executive Summary**

This report presents the results of a public opinion survey conducted by Oraclepoll for the City of Guelph between May 23 and June 3, 2013. The goal of the survey was to gain additional insight into electors' perceptions of voting experiences in the City of Guelph and to gauge public sentiment regarding the potential use of a remote Internet or telephone voting option in future local elections. Overall results suggest widespread public support for the introduction of Internet voting and weak to modest support for the initiation of telephone voting. Public readiness for Internet voting can be seen through the fact that potential voters report being most likely to use that voting method in the 2014 City of Guelph election, more likely in fact than traditional paper ballots. Support for telephone voting is modest, even among those who report having poor knowledge of computers and who belong to older age groups. This implies there may not be the same level of public readiness for voting by telephone.

# The following are some key highlights of the findings based on the survey:

#### **Public Use**

- A majority (63 percent) of respondents say they would be likely to use remote Internet voting in a future local election.
  - o 42 percent say the same for voting by telephone.
- If all ballot options were offered nearly half of all respondents (48 percent) say that they would vote remotely by Internet, 40 percent by paper ballot, and 8 percent by telephone.
- Those aged 34 to 44 reports being most inclined to make use of remote Internet voting.

#### **Turnout**

- Introducing *online/telephone voting* is the second most cited strategy for how to encourage electoral participation in City of Guelph local elections.
- A majority of non-voters say that they would vote if Internet (55 percent) and telephone (56 percent) voting were an option.
- Non-voters 18 to 44 and over 65 express strong agreement that an Internet voting option would encourage their participation.
- Non-voters over 65 express a noticeable willingness to vote if telephone voting was offered.

#### Access to, and confidence in, the technology

- A majority (62 percent) of respondents say they would feel confident voting by Internet.
  - Nearly one half (47 percent) say the same about telephone voting.
- 87 percent of respondents have Internet access at home.
- 72 percent use the Internet daily.
- 80 percent of those without access have an income of \$39,999 or less.

## Introduction

The City of Guelph recently commissioned a public opinion survey to shed light on voting experiences. Notably questions sought to gauge public supportiveness and readiness to adopt alternative electronic methods of voting, including Internet and telephone ballots. This report provides a summary and analysis of the results collected from the 2013 City of Guelph Survey. The goal of the report is to present city administrators and councilors with public perspective of election experiences to help inform their decision regarding whether to introduce an electronic voting option(s) in the 2014 City of Guelph election.

In particular, this report draws on the survey data to answer some specific questions about the possible introduction of Internet and telephone voting options in City of Guelph's 2014 municipal election. These questions include:

- Would the public make use of remote Internet and telephone voting methods?
- Is there a potential impact on voter participation?
- Is there a potential impact on specific groups that may experience greater difficulty participating such as youth and seniors?
- Do electors have access to the technology?
- Do electors have confidence in voting using the technology?

# Who took part in the poll?

The 2013 City of Guelph Survey was carried out between May 23 and June 3, 2013 by the survey firm Oraclepoll. 600 randomly selected residents of the age of majority were contacted and surveyed by telephone. A focus of the survey was to attain equal representation from all 6 wards and this was achieved with 16.7 percent of respondents belonging to each of the wards. The average respondent comes from an urban, suburban neighborhood, has completed technical, community college, has an annual income between \$50,000 and \$59,999, and is between the ages of 45 and 64.

Gender is slightly overrepresented in this sample, with females accounting for 58 percent of respondents. In terms of age, there is an oversample of older electors. A majority (53 percent) of those surveyed report being 55 and older and 71 percent of the group is 45 and older. This presents some limitations and advantages for data analysis. While there is an under-representation of younger age cohorts, which means there is a greater margin of error for this group, the oversample of older electors provides for more reliable estimates of their attitudes and potential behaviour. Having a larger group of older electors can be helpful in a few ways.

First, older electors typically participate in elections at a greater rate than younger electors. Also, remote electronic voting data from other Canadian municipalities has shown that older age cohorts (those over the age of 55) are the most likely users of the service. Given that this group participates in elections most frequently and has been the largest user group in other communities, it is helpful to have a more reliable picture of whether middle-aged and senior residents in the City of Guelph would make use of the service(s). Furthermore, having an oversample is useful since greater concern is expressed about older electors having access to computers or electronic devices with Internet connections, knowledge of digital technology, and indicating a preference for traditional voting processes and methods.

If future data were collected it would be fruitful to try and achieve more equitable representation among age groups, particularly for the youngest electors since engaging this group is often cited as a rationale for considering electronic voting methods.

Finally, a large majority of respondents report having voted in the previous municipal, provincial, and federal elections; 87 percent, 88 percent, and 89 percent respectively. About an equally large number report being likely to participate in future elections. While voting behaviour is typically over-reported in surveys because it is seen as socially desirable, a larger sample of non-voters would help to better assess whether the option of remote electronic voting methods might entice these electors to participate.

# Potential public use of remote Internet or telephone voting methods

An important consideration when evaluating whether to adopt alternative voting methods is whether electors will make use of the option. Survey respondents were asked some questions about potential use of Internet, telephone, and paper ballot methods, namely whether they would be likely to make use of Internet and telephone voting in local elections, and what their preferred type of ballot would be overall. Results suggest strong public support for the introduction of Internet voting and weak to modest support for the introduction of telephone voting. Those electors surveyed indicate that they would make use of Internet voting in particular, and that it would be the preferred type of ballot.

When asked, "If you could vote remotely online, how likely would you be to use that method to vote in a future municipal election?" a majority (63 percent) of respondents express that they would be very likely or somewhat likely to use remote Internet voting in a future local election. By comparison, about a quarter (26 percent) say that they would be somewhat or very unlikely to make use of this method of voting at the local level. This suggests that many eligible electors would cast a ballot by Internet remotely. Looking at these results by age group (see Figure 1) reveals that electors aged 18 to 44 reports being particularly inclined to make use of remote online voting, with those aged 34 to 44 being most likely to do so. This differs slightly from other data addressing Internet voting use at the local level collected in the City of Markham, in which the two youngest age groups reported the strongest likelihood to vote by Internet.

When asked the same question about telephone voting 42 percent of respondents report they would be somewhat or very likely to vote by telephone, while 43 percent indicate being somewhat or very unlikely to do so. Electors' support for voting by telephone in future local elections is much weaker than attitudes toward Internet voting. Furthermore, many respondents aged 18 to 54 say that they would be neither likely nor unlikely to use telephone voting, suggesting a degree of ambivalence toward the voting method. Telephone voting is typically proposed as an alternative voting method that is more appealing to senior citizens than voting by Internet given their familiarity with telephone technology, however even the oldest age group seems somewhat more inclined to try Internet voting than telephone.

Figure 1: Agreement with "If you could vote **remotely online**, how likely would you be to use that method to vote in a future municipal election?"

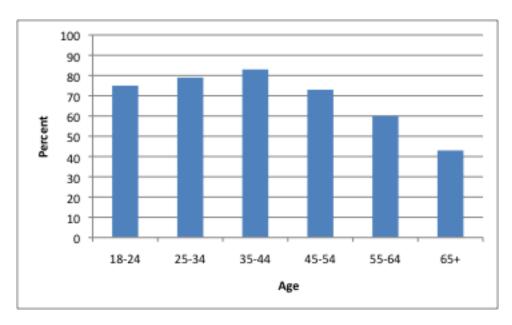
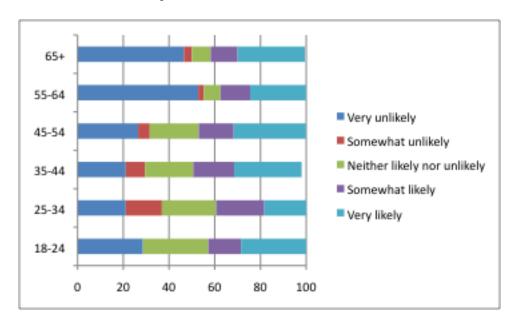


Figure 2: "If you could vote **by telephone**, how likely would you be to use that method to vote in a future municipal election?"



Further evidence of Internet voting being preferred over telephone is found looking to responses regarding which voting method electors would use to cast their ballot in the 2014 City of Guelph election when given the choice between Internet, telephone, or traditional paper ballots. Nearly half of all respondents (48 percent) say that they would vote remotely by Internet, 40 percent by paper ballot, and 8 percent by telephone (see Figure 3). Examining responses by age reveals that all age groups, other than those 65+, select

Internet ballots as their preferred voting method, or equal in preference to paper ballots (see those aged 55 to 64). This suggests that voters would vote remotely online.

Figure 3: "If the City of Guelph offered remote Internet, telephone, and traditional paper ballots in the 2014 municipal election, I would be most likely to vote by:"

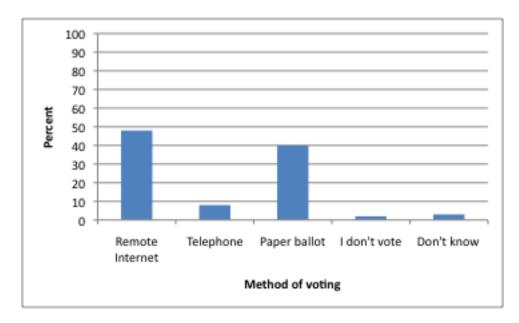
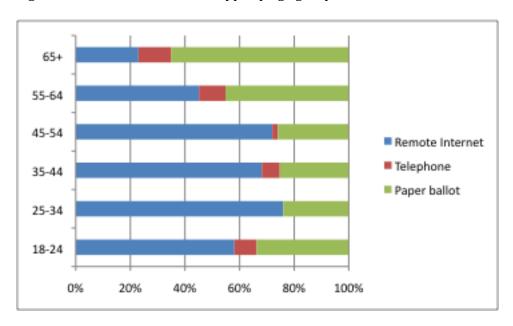


Figure 4: Estimated use of ballot type by age group



Those reporting average to very good knowledge of computers, and those reporting having accessed the Internet on a daily basis, are more likely to say they would vote by Internet. However, those with less familiarity and experience still express that they would be willing to give it a try. For example, one half of respondents (50 percent) who report using the Internet once a week say they would vote by Internet compared to one quarter (25 percent)

of the same group who say they would cast a paper ballot. Furthermore, a small group of respondents without access to the Internet express that they would like to vote online. These results suggest that some of those who have less practice using computers and the Internet are inclined to use remote online voting. If introduced, it would be helpful to ensure public access points were made available with qualified representatives to provide access and assistance for those without the Internet or knowledge of how to use it.

Findings from 34 Ontario municipalities that offered a remote Internet voting option in the 2010 local election supports Internet voting as the most popular method of casting a ballot when offered alongside telephone and paper ballots (see Figure 6). This evidence, coupled with the information collected in this survey, implies that City of Guelph electors would make use of the service if it were an option. With respect to age, data collected from the same election reveals that older electors (those aged 50 to 99) are more likely to vote by Internet than their younger counterparts (those aged 18 to 49) (see Figure 5). This result has less to do with the attraction of online voting, but is a consequence of the fact that older electors are more committed to voting and therefore participate in elections more frequently. Reported rates of use from younger age groups suggest that an Internet voting option would be used by electors representing a variety of age cohorts.

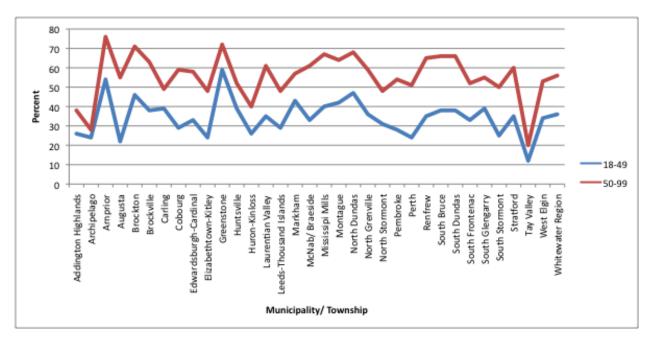
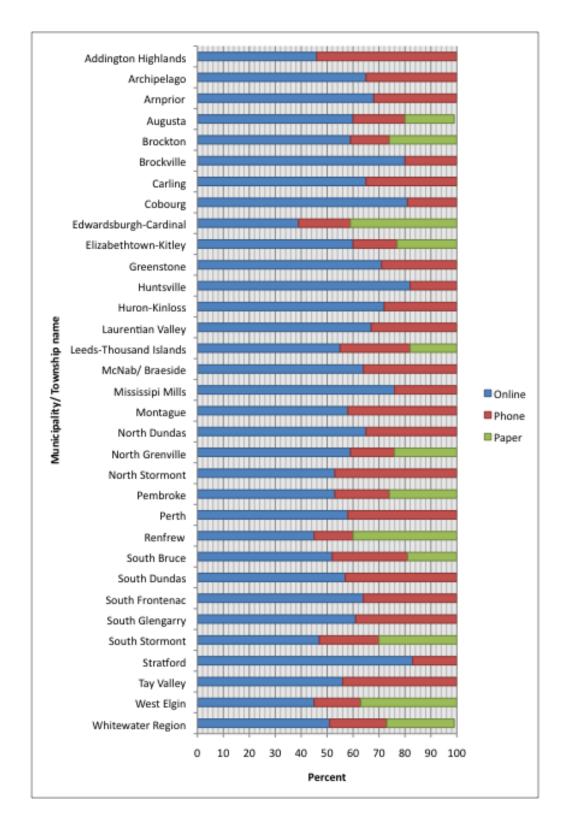


Figure 5: Age of Internet voters in Ontario municipalities in 2010

Figure 6: Method of voting used in Ontario municipalities in 2010



# Potential impact on voter participation

Voter turnout is a concern for all levels of government in Canada. For various reasons turnout has noted a decline, which appears to be a long-term trend. Interestingly, while there is a secular turnout decline at federal and provincial levels, municipal turnout has been shown to be much more volatile. Internet voting is suggested as a change that may positively impact voter turnout. In a Canadian context, we do not have the data to support this assertion. We do know that Internet voting has had a positive impact on voter turnout based on some experiences, but in other cases there is no effect or a decrease. In Europe there is limited research on the impact of Internet voting on voter participation. One study analyzing local elections in the country of Estonia shows a positive effect of 2.6 percent, while another study examining national elections there finds no impact.

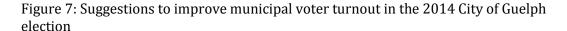
There are many contextual factors that impact levels of voter participation in elections. The combined impact of multiple variables makes it difficult to say for certain whether one structural change, such as introducing the option of Internet or telephone ballots, would have a positive effect on voter participation in local elections. For example, factors such as the perceived closeness of the race, the issues being addressed, types of candidates running, and the perceived importance of the election are some elements that can have an important impact on voter participation. The incredible inter-complexity of the variables that impact electoral participation suggests one factor alone will not remedy decreases in turnout. That said, the volatility of municipal turnout suggests it may be simpler to affect with the right mix of factors.

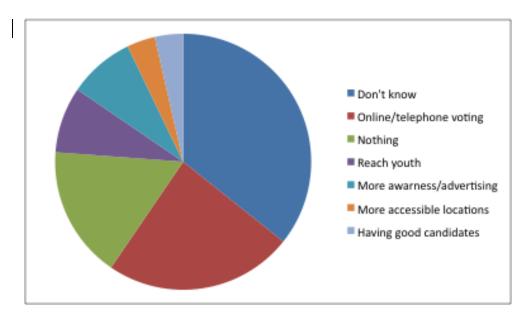
Data from the 2013 City of Guelph Survey finds some support to suggest the introduction of an Internet voting option may improve electoral participation, but this information should by no means be taken as a certainty that an increase would occur. Respondents were asked to make suggestions to improve municipal voter turnout. While nearly one third (30 percent) said they *did not know* of a solution. Next, *online/telephone voting* was the most frequently cited strategy for how to encourage electoral participation (see Figure 7). Suggestions that *nothing can be done, reaching youth, promoting awareness/advertising, increasing the number of accessible voting locations, and having good candidates were also mentioned.¹ While these responses are no clear indication voter participation would increase as a result of offering electronic voting methods, some suggest electors may believe options that improve accessibility and convenience will help.* 

Although a small portion of survey respondents report having not voted in previous elections (13 percent) the reasons they provide for not participating municipally sheds light on whether alternative methods of voting could help. A large proportion of responses express a *lack of support for candidates* and a *need for better information* both in terms of the electoral event itself and also with respect to candidate policies. Another group say they *don't care about/ dislike* politics. The remainder of comments focuses on issues of accessibility. These include being *too busy* to make it to the polls, being *out of the city/province/country, illness/age,* and *inconvenient voting locations*. These types of considerations can be addressed in part by enhancing the accessibility of the voting process through an extended advanced voting period, the presence of voting locations in higher traffic public areas, and remote voting methods, electronic or otherwise, that would allow electors to cast a ballot from their home or work, and while traveling or ill. Previous

<sup>&</sup>lt;sup>1</sup> Please note other suggestions were made, but they occupied 2 percent or less of the total responses.

research has shown that the convenience and accessibility offered by remote electronic voting methods, particularly Internet voting, is appealing to electors that cite these latter reasons for not having participated.





Electors that report not voting in previous elections were asked, "If remote Internet/telephone voting were available I would vote in municipal elections" to shed some light on whether these service options would promote electoral participation (see Figure 8). A majority of respondents express agreement that they would vote in municipal elections if these service options existed. Some respondents are again ambivalent regarding whether telephone voting would entice their electoral involvement, while they are much more decisive with respect to Internet voting, either positively or negatively. By age, those nonvoters under 44 and over 65 express strong agreement that Internet voting would encourage their participation; while for telephone just those over 65 express a noticeable willingness to vote if it were an option. This information does not signify that turnout would surely increase if these methods were available, non-voters could just be saying this would help when there could be other more influential factors which effect their motivation to participate, but it suggests these voting methods may have an impact especially for younger and older electors.

Overall these results can be taken as evidence that some electors may be more inclined to participate if remote electronic voting methods were offered in the 2014 City of Guelph municipal election, especially Internet ballots. Younger and older non-voters report being especially likely to participate as a consequence and generally the accessibility offered by these options may promote the involvement of those electors who may not have participated because they were too busy, ill, traveling, or perceived voting locations to be inconvenient. That said, the introduction of these voting methods are by no means a guarantee that there will be a positive impact on voter participation and such structural changes will not be a panacea for voter apathy.

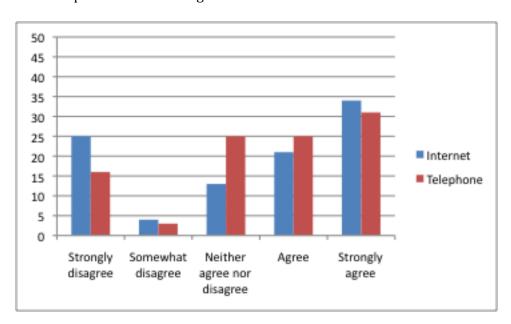


Figure 8: Agreement with "If remote Internet/telephone voting were available I would vote in municipal elections" among non-voters

# Access to and confidence in the technology

Resident access to, and confidence in, remote electronic voting technologies is an important prerequisite when considering its adoption. As noted above, there is strong reported access to the Internet in the City of Guelph. 87 percent of respondents say they have access and a further 87 percent indicate they have access to an Internet connection from their home. 72 percent of residents surveyed express that they access the Internet daily, 10 percent do so on a weekly basis, and 4 percent on a monthly basis. This suggests relatively robust Internet penetration among the public. Still, however, 13 percent of those surveyed report not having access. Should Internet voting be adopted it would be important to put measures in place which promote accessibility of Internet ballots by all.

Examining access to Internet by income reveals that about 80 percent of those without access have an income of \$39,999 or less. Looking more closely we see that the lower the reported income the less likely a respondent is to report having Internet access at home. This suggests that income may be a key factor in lack of online access for residents. Taking into account access to Internet by age shows that those belonging to the youngest age group (18 to 24) and the oldest age group (those 65+) report the lowest rates of access. Given that Internet voting is widely regarded as a change to improve accessibility it is salient to ensure this complementary method of voting does not exacerbate inequalities for those who do not have, or cannot afford, access.

In terms of confidence in the technologies, 62 percent of respondents overall report agreement or strong agreement with the statement, "If remote Internet voting were an option for the 2014 municipal election in Guelph, I would feel confident casting my vote online." When asked the same question with respect to voting by telephone 47 percent say they would feel confident casting a ballot that way. Particularly for Internet, this suggests relatively strong public confidence in the transmission of online ballots. Looking at

responses by age we see stronger confidence for Internet ballots, especially among electors 64 and under. 48 percent of electors 65 and older, however, disagree that they would be confident casting a ballot by Internet. This is an important finding and one that would have to be addressed with public education and outreach should this voting method be adopted.

Figure 9: Agreement with "If **remote Internet voting** were an option for the 2014 municipal election in Guelph, I would feel confident casting my vote online" by age

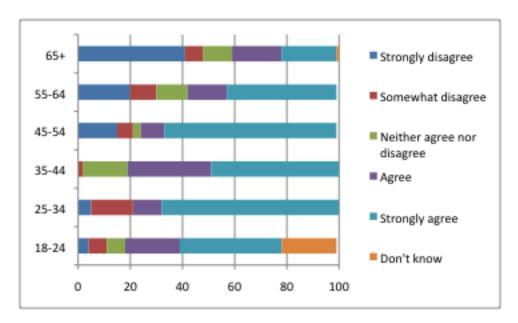
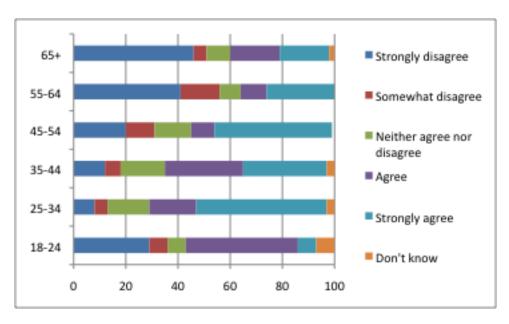


Figure 10: Agreement with "If **telephone voting** were an option for the 2014 municipal election in Guelph, I would feel confident casting my vote by telephone" by age



Confidence in the transmission of telephone ballots is lower among most age groups (except those aged 25 to 34). Notably a majority of those aged 55 to 64 and 65 and older disagree that they would feel confident voting by telephone; 55 percent and 51 percent respectively. Lower confidence in, and reported use of, telephone voting raises questions regarding its effectiveness as an alternative voting method. A robust education and information campaign would be recommended if council decided favourably to adopt it for the 2014 local election.

Overall results indicate there is robust Internet access and penetration among residents. Furthermore, electors express moderate to strong confidence in Internet ballots and more modest confidence in voting by telephone.

## **Conclusion**

Information collected by 2013 City of Guelph Survey on voting experiences suggests public supportiveness and readiness for remote electronic voting methods. There is particularly strong support for an Internet voting option. A high proportion of electors report having access to the Internet, express confidence is casting their ballots online, and say they will make use of Internet voting, more so in fact than traditional paper ballots. There is weak to modest support for telephone voting and confidence in the transmission of votes using the technology is not as strong as by Internet. Furthermore, there is minimal reported use of telephone voting in future elections. Overall, public attitudes suggest that remote voting by Internet is a desirable alternative voting method for future local elections. Although there is interest in telephone voting, survey results imply this method is less attractive.