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## Investigating the Effects of Telephone and Internet Voting on Election Administration in Rural Ontario Municipalities

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**Investigating the Effects of Telephone and Internet Voting  
on Election Administration in Rural Ontario Municipalities**

Subject keywords: Municipal Elections, Rural, E-Government,  
Election Administration, Internet Voting, Telephone Voting

MPA Research Report

Submitted to

The Local Government Program  
Department of Political Science  
The University of Western Ontario

Carson Lamb  
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## Executive Summary

Existing research that has been conducted on telephone and internet voting in Canada has focussed almost exclusively on large, urban municipalities. Yet in Ontario, local governments of all sizes have adopted these modes of voting. As a result, very little is known about the effects of telephone and internet voting in rural municipalities and this is problematic. This paper attempts to address this gap in the literature by examining telephone and internet voting in the context of rural municipalities in Ontario. It relies on a qualitative multi-case cross-sectional design to generate exploratory findings on the effects that the adoption of telephone and internet voting has on election administration in rural Ontario municipalities.

The data are drawn from semi-structured interviews held with key election administration staff within two rural municipalities in Ontario and are compared using interpretive methods. Analysis of the data suggests that there are nine different themes present in the experiences of rural municipalities. Each of these themes is treated as a different effect of adopting telephone and internet voting, and overall the findings suggest that the adoption of telephone and internet voting has tended to be a positive experience for election administrators in rural municipalities in Ontario.

## Acknowledgements

This study would not have been possible without the assistance of many individuals. First, I would like to thank my parents, Patti and Glen, and my girlfriend, Courtney for offering me their endless love, support and encouragement throughout my academic endeavours. These past five years of study would not have been possible without the sacrifices that were made along the way.

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Finally, I would like to thank the excellent and accommodating coworkers I have had the pleasure of working with at both the Ministry of Municipal Affairs and Housing's Municipal Services Office – Western, and at the Township of North Huron. It was certainly a challenge to work full-time and complete the MPA program full-time, but it pushed me in a good way and helped me grow as an individual, scholar, and employee. I could not have had the success that I have had without the great support, accommodations, and knowledge sharing at both workplaces and I am forever grateful.

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## Chapter 1: Introduction

Over the last fifteen years, Canada has experienced a significant increase in the use of telephone and internet voting in binding municipal elections. In particular, this trend is heavily concentrated in Ontario, which saw an increase in the use of telephone and internet voting by 84 municipalities from the 2014 to 2018 municipal elections.<sup>1</sup> While the research on telephone and internet voting has grown considerably, a problem still exists. More specifically, to this point, most of this research on Canadian municipalities has focussed solely on large, urban municipalities. However, this is problematic because in the 2018 Ontario Municipal Elections, 42.3 percent of municipalities used some form of telephone and internet voting.<sup>2</sup> Knowing this, it is evident that municipal governments of all sizes are adopting telephone and internet voting, and given this gap between research and practice, this paper focuses on the dynamics of telephone and internet voting and election administration in rural municipalities in Ontario. In pursuit of this goal, research methodology has been developed to address the question “What are the effects of solely using telephone and internet voting on election administration for rural municipalities in Ontario?”

This report is structured as follows. Chapter two outlines the nature and background of the research conducted in this paper. This chapter starts by defining what is meant by telephone and internet voting, and then the importance of the research question and the aim and scope of the research are explained. Following this, the remainder of the chapter is dedicated to a description of election administration at the municipal level. In combination, this chapter establishes a foundational base that is essential to understanding the specific research being

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<sup>1</sup> Association of Municipalities of Ontario, *2018 Municipal Election – Fun Facts* (Toronto: Association of Municipalities of Ontario, 2018).

<sup>2</sup> Ibid.

conducted. In the third chapter, a compilation of existing literature on telephone and internet voting is discussed. The purpose of this chapter is to provide a comprehensive description of what is already written on the topic so that the research in this project can build off of what is already known. Specifically, the literature review contained in chapter three incorporates both the theoretical and empirical research written on the topic to allow for a holistic compilation of information on telephone and internet voting.

The latter chapters of this report are focussed on the data collection process and the analysis of the primary research that has been undertaken. To be more precise, chapter four outlines the research design and methodology used for collecting and analyzing the data. Here, the paper describes the operationalization of concepts, research design, research methods, sampling and case selection, recruitment strategy, data analysis strategy and ethical considerations. As for the fifth chapter, a high-level explanation of the participants selected, and the data triangulation methods used is provided to allow for a depiction of the data being studied. In chapter six, a structured analysis and discussion of the data is conducted. Importantly, the data analysis in this project seeks to identify numerous different themes that were present in rural municipalities that used telephone and internet voting. After an analysis, it is evident that there are nine major themes that can be extracted from this research. Finally, chapter seven is dedicated to concluding remarks and providing a number of recommendations for future research in order to investigate telephone and internet voting in rural municipalities further.

## Chapter 2: Nature and Background of the Research

### 2.1. Defining Telephone and Internet Voting

To begin, it is important to define what is meant by telephone and internet voting. In particular, a distinction needs to be drawn between telephone and internet voting and electronic voting. To elaborate, policy makers often refer to voting by telephone and internet as electronic voting.<sup>3</sup> However, the two terms are not interchangeable as electronic voting is a blanket term and refers to any voting method that utilizes electronic technology. For instance, electronic voting not only includes telephone and internet voting, but also machine counting and at-polls computer voting.<sup>4</sup> In other words, telephone and internet voting is simply one subcategory of electronic voting. Thus, only the telephone and internet voting subcategory of electronic voting is focussed on in this research project.

Furthermore, it is important to establish that the definition of telephone and internet voting that is being used in this paper incorporates all types of telephone and internet voting. To expand, telephone and internet voting refers to any mode of voting in which the ballot is cast via the telephone or over the internet. For example, voting from a remote location such as a home or workplace, as well as voting from a designated municipal voting station, would fall under this definition.<sup>5</sup> This is extremely important as it is a common practice for many municipalities to establish a small number of designated voting stations or kiosks within their municipality for citizens who require help with casting their vote via telephone or the internet.

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<sup>3</sup> Nicole Goodman, Jon H. Pammett, and Joan DeBardeleben, "Internet voting: the Canadian municipal experience," *Canadian Parliamentary Review* 33, no. 3 (2010): 13.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

## 2.2. Research Question and Its Importance

As stated in the introductory chapter, the research question addressed in this project is, “What are the effects of solely using telephone and internet voting on election administration for rural municipalities in Ontario?” Investigating this research question is important, and adequately depicting the reasons why requires examining the historical context of elections. To elaborate, elections are a central component of modern democracy.<sup>6</sup> With direct democracy being simply unattainable, Canada and most other developed countries have opted for representative democracy. In a representative democracy, citizens grant elected officials the authority to represent their views on their behalf, and those representatives are chosen through elections. Consequently, elections have an immense importance and impact on governance at all levels in Canada, and this has led to the constant scrutiny of different components of electoral systems.<sup>7</sup>

At the municipal level, this scrutiny has largely manifested itself through debates and investigations in four specific areas: ward versus at-large district magnitudes, electoral formula, the allowance or disallowance of political parties, and voting methods.<sup>8</sup> Thus, as governments, citizens, and academics continuously search for ways to improve municipal elections to ensure and increase their representativeness, it is important to investigate voting methods because it is an area of extreme significance.

Additionally, investigating this research question with a particular focus on Ontario municipalities is important considering its increased relevance in Ontario. To elaborate, Ontario’s *Municipal Elections Act* (MEA) grants municipalities the ability to use alternative

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<sup>6</sup> Law Commission of Canada, *Voting Counts: Electoral Reform for Canada* (Ottawa: Law Commission of Canada, 2004), 1.

<sup>7</sup> Aaron Moore, “The potential and consequences of municipal electoral reform,” *IMFG Perspectives*, no. 20 (2017), 3.

<sup>8</sup> *Ibid.*, 4.

voting methods in their elections and this is specifically reflected in Section 42(1)(b) where it permits municipal Councils to “pass by-laws authorizing electors to use alternative voting methods that do not require electors to attend a voting place in order to vote.”<sup>9</sup> Since these methods have been permitted, Ontario has witnessed a greater increase in the number of municipalities passing these authorizing by-laws compared to the rest of Canada, as Ontario municipalities are both able and more accepting of their use. Evidence of these trends can be extracted from 2010 municipal elections data where 43 municipalities used telephone and internet voting in Ontario, compared to the next closest province of Nova Scotia where it was used by 4 municipalities.<sup>10</sup> Therefore, understanding the effects of telephone and internet voting on municipalities in Ontario is very important.

Finally, focussing on rural municipalities is important due to the gap in both the academic and professional literature. To expand, as more municipalities in Ontario have started to adopt telephone and internet voting, an unequal amount of literature has been written about the topic. As stated in the introduction, the problem is that the literature that has been written on telephone and internet voting is solely focussed on large, urban municipalities. Thus, it is important to determine whether the same conclusions drawn from the existing literature regarding telephone and internet voting in urban municipalities is transferable to the experiences of rural municipalities. If this is not the case, then perhaps there should be some reconsideration on the part of the numerous rural municipal Councils who have voted to authorize telephone and internet voting. Thus, the data being collected in this project has many meaningful implications

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<sup>9</sup> Government of Ontario, *Municipal Elections Act, 1996*, Toronto, ON: Government of Ontario (1996): Section 42(1)(b).

<sup>10</sup> Nicole Goodman, “Internet Voting in Canadian Municipalities: What Can We Learn?” *Carleton University*, 2010.

for rural municipalities, and knowing this, investigating the effects of telephone and internet voting on rural municipalities in Ontario is extremely important.

### 2.3. Research Aim and Scope

Given the above discussion regarding the lack of literature on telephone and internet voting in rural municipalities in Canada, let alone Ontario, the aim of this research project is exploratory. As explained by Sandra Van Thiel, exploratory research “investigates a subject about which little or no knowledge is available... and results in detailed empirical descriptions.”<sup>11</sup> In other words, this research project aims to gather detailed empirical descriptions to learn more about the broad effects of telephone and internet voting on election administration in rural Ontario municipalities. Ideally, the outcome of this research is to collect the initial empirical descriptions and findings on this understudied topic so that future research can refine the issues identified for more systematic investigation and formulation of new research questions.

While the research in this project being conducted is exploratory, it is important to note that it is simply too large of a task to investigate all of the effects that telephone and internet voting has on rural municipalities. Considering the fact that telephone and internet voting in rural municipalities is such an understudied area, the effects that could be investigated are endless. However, to narrow the scope of this research project into a feasible study, only the effects related to election administration are being examined. In other words, this project investigates how adopting telephone and internet voting as the sole voting methods in rural municipalities affects those responsible for administering municipal elections. Resultantly, how the adoption of

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<sup>11</sup> Sandra Van Thiel, *Research Methods in Public Administration and Public Management: An Introduction* (London: Routledge, 2014), 15.

telephone and internet voting effects candidates, current elected officials, or constituents is not within the scope of this study.

#### 2.4. Municipal Election Administration Structure and Process

Knowing that the focus of this study is to investigate the effects that telephone and internet voting has on election administration in rural Ontario municipalities, it is important to first describe the overall election administration structure and the process of municipal elections. This is an important component of this research paper as it establishes a starting point to allow for a comparison of the changes between the historically used traditional, at-polls voting, and the adoption of telephone and internet voting.

Importantly, elections for municipal governments are held every four years on the fourth Monday of October. The structure and process of these elections are primarily outlined within the Ontario *Municipal Elections Act*. At its simplest, under Section 11 of the *Municipal Elections Act*, the role of the Clerk is to conduct the elections within the municipality.<sup>12</sup> Essentially, other than the various specific provisions where Council has authority – for example, passing a by-law to approve an alternate voting method, change Council composition, amend a ward structure, or approve the budget – the Clerk is responsible for establishing all policies and procedures for the conduct of the election in the municipality, subject only to the provisions of the MEA, its regulations and other legislation.<sup>13</sup> In other words, for municipal election administration, the Clerk has very broad authority and significant responsibility.

For municipal elections, the Clerk establishes the number and location of voting places for the election. A request for a voting place must be made at least 14 days before voting day and

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<sup>12</sup> Government of Ontario, *Municipal Elections Act, 1996*, Toronto, ON: Government of Ontario (1996): Section 11.

<sup>13</sup> *Ibid.*

a space must be provided free of charge. Moreover, Clerks determine the dates and times for advance voting, reduced voting hours in certain institutions, and whether or not to open early on voting day. However, it is important to note that if alternative voting methods are used, it is up to Council to determine whether that alternative voting method will include advanced voting. If Council decides to include advanced voting, then the Clerk needs to determine appropriate dates and locations for advanced voting as well.

As for election personnel, it is the Clerk's responsibility to appoint election personnel under Section 15 of the MEA. Importantly, Section 15 of the MEA allows the Clerk to appoint a Deputy Returning Officer (DRO) for each voting place.<sup>14</sup> However, if there is only one poll within the municipality, the Clerk may be responsible for conducting that poll and may not need to appoint a DRO. In other words, a DRO is necessary only where there is a poll that is not being conducted by the Clerk directly, and thus, the necessity of a Deputy Returning Officer is dependent on the voting method and number of polling stations being used. With alternative voting methods, multiple polling stations may not exist, and this eliminates the need for a DRO. Resultantly, this is much different than election administration for traditional, at-polls paper ballot elections.

Under Section 15, the Clerk may appoint other election administration as well.<sup>15</sup> Specifically, in municipalities with many polling stations, some municipal Clerks have used other optional positions to assist with the administration of duties at a busy voting place, such as poll clerks capable of assisting the DRO with management of the Voters' List, and the count.

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<sup>14</sup> Ibid., Section 15.

<sup>15</sup> Ibid.

Overall, the Clerk can delegate all or some election powers to election personnel and this is an important aspect of election administration.

Ultimately, election administration is a large task for municipal Clerks that involves many duties. The Clerk is responsible for: receiving nominations from candidates, registering third party advertisers, calculating and providing spending limits to candidates and third party advertisers, calculating and providing spending limits for parties and expressions of appreciation, managing and correcting the Voter's List, planning community outreach and information sessions, determining and arranging for appropriate voting locations, establishing advance voting dates and voting hours, preparing an accessibility plan and posting it publicly prior to voting day, and making post-election accessibility reports available to public.<sup>16</sup> These duties are among the many other tasks required of the Clerk, making election administration a significant responsibility that is nearly a year-long process at the municipal level.

### Chapter 3: Literature Review

With the election administration structure and the process of municipal elections depicted, it is important to discuss how the literature relates to election administration. More specifically, it is vital to focus on how telephone and internet voting can potentially alter or impact this structure and process. In other words, in this chapter, an overview of the existing literature on telephone and internet voting as it relates to election administration at the municipal level is provided.

As stated previously, the literature on telephone and internet voting in municipalities is modest. However, it is important to note that the information that has been written is varied,

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<sup>16</sup> Ibid., Section 13.

including both theoretical and normative discussion, as well as descriptive and empirical work. Resultantly, to allow for a holistic compilation of existing literature on the topic, it is essential to discuss both the theoretical and empirical literature that has had an impact on the study of telephone and internet voting in municipalities. Knowing this, this chapter first incorporates a compilation of the existing theoretical literature that has been written on the speculated benefits, risks, and drawbacks of telephone and internet voting and their effects on the administration of municipal elections. The chapter then goes beyond the theoretical and investigates how telephone and internet voting is taking shape in Canadian municipalities by discussing two prominent empirical case studies – the City of Markham and the City of Halifax. These two cities are discussed as they are the two most prominent jurisdictions to first adopt telephone and internet voting. Thus, this chapter incorporates the most recent, relevant and comprehensive literature in the municipal election administration context, and in combination allows for both the theoretical and empirical aspects of the topic to be depicted. Resultantly, this allows the research in this paper to expand on the current knowledge of telephone and internet voting and its effects on election administration. The chapter concludes by discussing the main takeaways that can be extracted from the existing literature on telephone and internet voting.

### 3.1. Theoretical Research

The literature on telephone and internet voting can be divided into two camps. The much larger camp has tended to take a primarily theoretical and normative focus whereas the smaller camp has focused primarily on empirical effects. In terms of the first camp, much of the debate has focused on whether telephone and internet voting is a convenient and barrier-reducing way to vote that offers many positive aspects, or whether it is a significant risk to the security and

integrity of the voting process that contains many detriments.<sup>17</sup> These themes, of course, are highly relevant and have significant consequences for municipal election administration. The following sections review the debate on these two notions before summarizing the empirical literature on the topic.

### *Benefits:*

#### *3.1.1. Ease and Accessibility*

Given that votes can be cast from anywhere with a working telephone or internet connection, some researchers suggest that telephone and internet voting has the potential to make the voting process “easier and more accessible.”<sup>18</sup> Telephone and internet voting may eliminate long lines at polling stations and allows for easier and more convenient access for any person who finds it difficult to attend a voting station when a municipal election is conducted using the traditional, at-polls voting method.<sup>19</sup> For example, single parents, those serving in the military, individuals on vacation or away at post-secondary school, and those with physical disabilities all could find the voting process easier and more accessible if they had access to telephone and internet voting.<sup>20</sup>

Primarily, the crux behind this speculated benefit is the idea that with the use of telephone and internet voting methods, voting in a municipal election is not limited to any specific locations or even to the specific jurisdiction in which the election takes place.<sup>21</sup>

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<sup>17</sup> Paige McWilliam, “Online Voting in Local Government Elections,” *School of Public Administration*, (Victoria: University of Victoria, 2014), 28.

<sup>18</sup> Nicole Goodman, Jon H. Pammett, and Joan DeBardeleben, “A Comparative Assessment of Electronic Voting,” *Elections Canada*, 2010.

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Lemuria Carter and Ronald L. Campbell, “Internet voting usefulness: an empirical analysis of trust, convenience and accessibility,” *Journal of Organizational and End User Computing* 24, no. 3 (2012), 5.

Resultantly, this flexibility is a convenience for many segments of eligible voters who find it troublesome to cast their vote at a polling station on the specified voting day due to their lifestyle, physical capabilities, occupation, or other impeding factors.<sup>22</sup> Electors can instead cast their ballot during what is often a longer voting period and can do so at a time and in a place that is most convenient for them. Consequently, this is a major benefit for election administrators that are tasked with making municipal elections the most open and accessible as possible in order to ensure democratic representativeness.

### *3.1.2. Faster and More Accurate Election Results*

A second touted benefit of telephone and internet voting is that these methods should produce faster, and more accurate and reliable election results compared to traditional methods. According to one study, “internet and telephone voting systems are said to deliver a faster official ballot tabulation process and are alleged to be more accurate than other types of machine counting.”<sup>23</sup> In other words, telephone and internet voting is regarded as being more reliable and efficient in terms of election administration compared to other voting methods that allow for human error to occur in the vote counting process. With telephone and internet voting, a computing system automatically tabulates the votes, which should be faster and more reliable and accurate than doing it by hand, which in turn should increase the efficiency of the administration of the municipal voting system.

### *3.1.3. Cost Savings*

Another major theme among this body of literature is that telephone and internet voting produce significant cost savings. In essence, various academics and professionals argue that

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<sup>22</sup> Goodman, Pammett, and DeBardeleben, “Internet Voting: The Canadian Municipal Experience,” 14.

<sup>23</sup> Ibid.

adopting telephone and internet voting will be a less expensive way to administer an election as it will eliminate numerous expenses that are necessary with other forms of voting.<sup>24</sup> By solely adopting telephone and internet voting, the need for polling stations and the associated expenses for staffing, training, building rental, and equipment would be reduced. Telephone and internet voting methods require less staff members and therefore less training, and also require fewer locations since voting is primarily done remotely rather than at designated physical locations. Consequently, without these expenses, the overall costs to administer an election should be reduced.

However, importantly, numerous authors argue that cost savings may only appear in the long-term. Specifically, others counter that while it may be true that there are long-term costs savings to be gained from these modes of voting, these modes also involve significant short-term, start-up costs to run the telephone and internet voting technology. Moreover, providing voter help kiosks can be expensive, and adopting a new voting method often requires significant funds to be spent on public awareness and education to inform citizens about the new voting system.<sup>25</sup> In the Chief Electoral Officer's Submission for Elections Ontario, it was acknowledged that for the adoption of telephone and internet voting to be done right, "there must be a comprehensive electoral modernization strategy outlining how transparency, education, public trust and cost effectiveness can be achieved."<sup>26</sup> While Elections Ontario acknowledged that this transitory strategy would be costly, it is still believed that in the long-term, cost reductions can be achieved, "particularly by jurisdictions that eliminate paper ballots."<sup>27</sup>

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<sup>24</sup> Goodman, Pammett, and DeBardeleben, "A Comparative Assessment..."

<sup>25</sup> Ibid.

<sup>26</sup> Chief Electoral Officer, "Alternative Voting Technologies Report: Chief Electoral Officer's Submission to the Legislative Assembly," *Elections Ontario* 2013, 20.

<sup>27</sup> Ibid., 7.

### *3.1.4. Improvement in Quality of Ballots Cast*

Finally, some authors suggest that election administration will be improved through a reduction in ballot errors and spoiled ballots. With telephone and internet voting, voters are unable to make ballot errors as the system simply will not let them.<sup>28</sup> Furthermore, depending on the legal structure in the jurisdiction, the municipality can eliminate the ability to spoil a ballot by having the system not permit it.<sup>29</sup> It is important to note that with most telephone and internet voting, the voter is able to review their selections before making a final submission. Thus, if any errors were to occur, the voter can ensure that these errors are corrected. However, for the most part, the technology itself can be customized to eliminate an elector's ability to vote for too many candidates or to make any other error that would result in a spoiled ballot. Overall, this results in a more efficient municipal election administration.

### *Risks and Drawbacks:*

#### *3.1.5. Security, Fraud and Coercion*

While much of the literature sees telephone and internet voting and their effects on the administration of elections as being positive, some believe that there are many risks and drawbacks with these modes of voting. One major risk of adopting telephone and internet voting is the increased potential for security threats. In particular, the election system may become more prone to computer viruses, hackers and the denial of service through electronic methods of voter suppression, tampering with election results, and stealing voter information.<sup>30</sup> This concern is particularly present when there is a risk to ballot secrecy.

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<sup>28</sup> Goodman, Pammett, and DeBardeleben, "A Comparative Assessment..."

<sup>29</sup> Ibid.

<sup>30</sup> Ibid.

These security concerns are even more threatening in the municipal context because many local governments do not know where the computer servers they use for telephone and internet voting are located.<sup>31</sup> For example, Aleksander Essex, a prominent academic in the field of cyber security, has stated that “the election server itself may not even be in Canada,” and that through his research he has found “encryption keys all over the world, including in China.”<sup>32</sup> Thus, while Section 163 of the *Canada Elections Act* requires votes in any Canadian election to be kept secret, this same legislated requirement may not be present in other countries.<sup>33</sup> Moreover, it is important to note that it is not just the server that can be compromised, but with telephone and internet voting, the election is also vulnerable to hacking through malware on any of the numerous constituent’s home computers that are being used to cast votes.<sup>34</sup>

Furthermore, with telephone and internet voting, researchers suggest that more opportunities are present for fraud and coercion, which in turn threatens ballot integrity.<sup>35</sup> Specifically, the literature suggests that with telephone and internet voting, it is harder to confirm that the person voting is who they claim to be. For example, with remote location voting, there are more opportunities for fraud to occur as voter notification cards that contain unique passwords may be intercepted by another individual.<sup>36</sup> Given that voting online or by telephone requires electors to be issued a registration card and PIN to sign in to vote, there is nothing stopping an individual from receiving the registration in the mail and activating the PIN to vote on behalf of that individual. This process is in great contrast to the traditional, at-polls voting process where electors are required to show photo ID or sign a declaration of their identity with

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<sup>31</sup> Colin Butler, “Ontario civic elections: the problem with online voting,” *CBC News*, April 4, 2018.

<sup>32</sup> *Ibid.*

<sup>33</sup> Government of Canada, *Canada Elections Act*, Government of Canada: Minister of Justice, Ottawa: 97.

<sup>34</sup> Butler, “,” “Ontario civic elections...”

<sup>35</sup> Goodman, Pammett, and DeBardeleben, “A Comparative Assessment...”

<sup>36</sup> *Ibid.*

someone who can vouch for their address and identity also being present.<sup>37</sup> Additionally, those living in the same house as other eligible electors may be coerced to vote in a certain way compared to when they are able to vote in isolation at a polling station and this potential coercion is a major theoretical risk. Thus, from an election administration perspective, switching to telephone and internet voting may not be worth effort if those administering elections are spending an increased amount of time addressing security, fraud, or coercion concerns compared to the traditional, at-polls election system.

### *3.1.6. Technical Issues*

Another potential risk to election administration is that telephone and internet voting may be more prone to technical issues. Due to the fact that telephone and internet voting relies on electricity, a range of issues may occur with the voting process if the municipality is subject to power outages, internet connectivity issues, servers crashing, or external bandwidth issues with the voting technology.<sup>38</sup> Consequently, these new issues could compromise the election, or at least result in the municipality having to spend additional funds to extend their voting period. In contrast, traditional, at-polls voting often has little to no reliance on technology making technical issues not nearly as prevalent. Ultimately, the introduction of more technology into the election process creates a greater risk for unexpected issues that are out of the municipality's control to arise. Thus, if these technical issues were to occur, adopting telephone and internet voting would be more inefficient for municipal election administrations than traditional, at-polls voting.

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<sup>37</sup> Elections Canada, "ID to Vote," *Elections Canada*, Gatineau, Quebec, June 19, 2019.

<sup>38</sup> Goodman, Pammett, and DeBardeleben, "Internet Voting: The Canadian Municipal Experience," 14.

### *3.1.7. Digital Divide Access Issues*

While access can theoretically be improved with telephone and internet voting, some argue that it can have the opposite effect, at least for certain segments of the electorate. More specifically, a common risk that is identified in the literature is that the adoption of telephone and internet voting makes voting less accessible for certain individuals because it has the potential to create divides based on socio-economic variables such as age, income, education, gender, geography, race, and ethnicity.<sup>39</sup> Not every citizen has access to a telephone or the internet, and if they do it might not be as high of quality or functionality that is needed. For instance, electors of a lower income class may not own a telephone or computer but may want to vote. However, because they do not own the required technology, this creates unequal access in their ability to vote and they may feel disenfranchised. In other words, a digital divide can emerge and have consequences for the municipal election process, making it potentially more burdensome and difficult for certain segments of the electorate to cast their vote. When this disparity in the access and capability to use digital technology is transferred to the electoral system, it becomes problematic for election administration as these individuals have an equal right to vote as well.

### *3.1.8. Insufficient Voter Education*

Another potential risk discussed in the literature is the idea that election administration may be negatively impacted by the use of telephone and internet voting through insufficient voter education. As mentioned earlier, it may be that significant time and money will need to be spent to ensure that all eligible voters are aware that telephone and internet voting is the method being used, and also to properly educate constituents on how to cast their ballot.<sup>40</sup> Without

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<sup>39</sup> Goodman, Pammett, and DeBardeleben, "A Comparative Assessment..."

<sup>40</sup> Ibid.

proper voter education, the adoption of a new voting method can be confusing for voters and lead to a decrease in voter turnout.

Moreover, while education campaigns may ease the transition to telephone and internet voting, a segment of the population will likely still be unaware of the change. As a result, municipal staff may be required to continually show electors how to cast their vote on voting day, leading to additional delays and costs. These problems may persist beyond one election cycle and given that voting in municipal elections generally occurs once every four years, and that federal and provincial elections do not use telephone and internet voting, it may be hard for electors to familiarize themselves with the new process. Thus, educating voters is a barrier, and overcoming it requires engaging stakeholders and educating and explaining the voting system early and often.<sup>41</sup>

### ***3.1.9. Voting Day Registration***

Finally, some argue that since voting online or by telephone requires electors to be issued a PIN to sign in prior to the election, voter registration can be a challenge. With one-step or two-step voting, electors are issued a voter information letter that contains their PIN, or information to obtain their PIN so that they can register prior to voting day.<sup>42</sup> However, given that voters must register prior to the election, some argue that this requirement can restrict or prevent an individual from being able to register to vote on Election Day. The idea here is that voters may find it confusing to get registered on voting day if they do not have their voter notification card and as a result they may choose to not vote at all.<sup>43</sup> In contrast, with traditional, at-polls voting,

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<sup>41</sup> Government of Canada, "Online Voting: A Path Forward for Federal Elections," *Government of Canada*, Ottawa, January 2017.

<sup>42</sup> District of Muskoka, "Muskoka Clerk's Report: Voting Methods for the 2018 Municipal Election." *District of Muskoka*, 6.

<sup>43</sup> *Ibid.*

electors are required to attend their designated polling station to vote anyways, so the registration process is much easier since there are multiple, convenient ways to register.

### 3.2. Empirical Research

While the literature on telephone and internet voting is rich in theoretical and normative debate, the empirical research in contrast is much less developed. Nonetheless, there have been studies conducted that are relevant to the issues raised in this project. A good example of this is the paper by Nicole Goodman titled: “The experiences of Canadian municipalities with internet voting.” In particular, this study has been monumental in the telephone and internet voting literature, as it goes beyond the theoretical, and investigates how internet voting is taking shape in Canadian municipalities for Elections Canada research. Goodman does this by examining what she refers to as “two of the more prominent jurisdictions” to adopt telephone and internet voting.<sup>44</sup>

In her analysis, Goodman investigates the municipalities of Markham and Halifax by examining and observing the subjective experiences of experts, professionals and municipal representatives in both municipalities. For her methodology, Goodman utilizes a series of unstructured qualitative interviews and also draws upon survey data collected by the municipalities themselves to highlight potential patterns.<sup>45</sup> Specifically, Goodman selected the cases of Markham and Halifax to investigate because at the time of the research they were the largest electorates in Canada to adopt telephone and internet voting.<sup>46</sup> While both of these jurisdictions are large, urban municipalities, discussing how internet voting has taken shape is of

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<sup>44</sup> Nicole Goodman, “The experiences of Canadian municipalities with internet voting,” *CEU Political Science Journal* 5, no. 4 (2010), 493.

<sup>45</sup> *Ibid.*, 494.

<sup>46</sup> *Ibid.*, 500.

particular importance as it allows for this project to build off the existing literature and investigate whether the same exploratory findings occur in rural municipalities as well. Thus, her main findings from these two jurisdictions are reviewed below.

### *3.2.1. The City of Markham*

In the case of Markham, the study found that internet voting made the voting process more accessible and convenient.<sup>47</sup> This effect is reflected in data from the 2006 election as the study found that 88 percent of respondents cited convenience as the number one reason for voting via internet.<sup>48</sup> Furthermore, it was found that accessibility was enhanced for voters through advanced polls trends as interviews with municipal candidates suggested that many of the electors they met while canvassing informed them that they had already voted. These data suggest that online voting in advanced polls made voting more popular, accessible and easier to do.<sup>49</sup> Overall, telephone and internet voting was regarded as a major success in Markham and none of the data suggested that the municipality experienced any security concerns or technical issues.

### *3.2.2. The City of Halifax*

As for the City of Halifax, the study found that while there was less data available in comparison to Markham, the effects of telephone and internet voting appeared to be positive as well. Specifically, in 2008, 30 percent of all ballots cast occurred through telephone and internet voting and in the 2009 by-election this number increased to 59 percent.<sup>50</sup> Beyond accessibility and increased use, the Halifax case found that Election Officials were pleased with the adoption

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<sup>47</sup> Ibid., 502.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid., 503.

<sup>50</sup> Ibid., 509.

of telephone and internet voting. Based on the evaluation criteria, Election Officials gave it a rating of 90 percent, particularly citing the convenience it provided to electors and administrative staff.<sup>51</sup> Furthermore, Election Officials stated that the cost advantage was also a factor, and that telephone and internet voting would allow them to reduce the number of polling locations in subsequent elections to help stabilize the rising costs of administering elections.<sup>52</sup> Additionally, it was also believed that the presence of a call centre during the advanced polls reduced costs by two thirds and helped ease the transition to the new voting system.<sup>53</sup>

Thus, based on the practical empirical experiences in Markham and Halifax, the study found that the effects of telephone and internet voting on the election administration in the two large, urban cities were mainly beneficial as opposed to having a wide range of risks and drawbacks. To what extent do these trends apply to rural municipalities in Ontario? The remaining chapters turn to this question.

### 3.3. Conclusions Drawn from the Literature

Overall, for the purposes of this project, there are two main takeaways that are evident in the existing literature. First, the literature reveals that there is nearly an equal amount of theoretical benefits to election administration as there are theoretical risks when considering the adoption of telephone and internet voting. Secondly, while the potential benefits and risks are balanced in the literature, the empirical experiences have not been as equal. When empirically examining the effects of telephone and internet voting on election administration in large, urban municipalities, the experiences have tended to be positive overall. Thus, building off this

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<sup>51</sup> Ibid., 510.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

research and investigating rural municipalities is undoubtedly important and using the potential benefits and risks as a guiding tool can help to systematically structure this investigation.

## Chapter 4: Research Design and Methodology

The purpose of this chapter is to outline the research design and methodology that was used for collecting and analyzing the data in this project. Knowing the importance of building off of the previous research on telephone and internet voting, the structure and design of this study has been strategically developed to address the question “What are the effects of solely using telephone and internet voting on election administration for rural municipalities in Ontario?” To sufficiently depict this design and methodology, this chapter describes each aspect and the considerations that were given to each aspect individually and in detail. Thus, this chapter proceeds through a discussion of each aspect as follows: operationalization of concepts, research design, research methods, sampling and case selection, recruitment strategy, data analysis strategy, and ethical considerations. While it will be discussed in detail throughout this chapter, it is important to note from the outset that under this research design and methodology, the municipalities and interviewees are fully anonymized in this project.

### 4.1. Operationalization of Concepts

To examine the research question “what are the effects of solely using telephone and internet voting on election administration for rural municipalities in Ontario?”, it was important to first operationalize the concept of *effects*. In doing so, the specific benefits, risks and drawbacks that were outlined and discussed in the theoretical and empirical literature review were incorporated. To expand, when examining the effects, the research in this study was concerned with the municipality’s experiences in relation to: ease and accessibility; faster and

more accurate election results; cost savings; quality of ballots cast; security, coercion and fraud; technical issues; digital divide access issues; insufficient voter education; and voting day registration. By analyzing what the experiences were with these variables, it allowed for the determination of what effects telephone and internet voting has on the administering of elections in rural Ontario municipalities.

#### 4.2. Research Design

As stated previously, the research question is exploratory in nature and is intended to learn more about the effects of telephone and internet voting on the election administration in rural municipalities. Thus, an inductive research design was used for this research as the project was not testing an existing theory or hypothesis but was instead focussed on exploring new phenomena as well as previously researched phenomena on urban municipalities from a different perspective. In other words, to guide the investigation of this understudied topic, the research design in this project utilized the broad assumptions already established in the theoretical and empirical literature to structure the study, and therefore the research also sought to determine whether the exploratory findings for urban municipalities such as Markham and Halifax were generalizable to rural municipalities as well. This structure aligns well with the exploratory research aim as inductive research is especially relevant for gathering broad empirical observations to identify patterns and trends when there is little existing knowledge on the subject.<sup>54</sup>

The research design employed in this study was a qualitative multi-case cross-sectional design. It compared the experiences of two rural Ontario municipalities at a specific point in time

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<sup>54</sup> Van Thiel, *Research Methods in Public Administration...*, 24.

to determine what aspects of the various theoretical benefits, risks, and drawbacks surveyed in the literature review section were present for the election administrators in their given municipalities. This multi-case structure allowed for a comparison of how the two municipalities and their election administrations were similar or different in regard to their current experiences with telephone and internet voting. This structure was chosen because the literature suggests it is a useful way of identifying trends or themes that may be investigated more in depth in future studies.

### 4.3. Research Methodology

Knowing that the research project sought to gather qualitative data, the information was collected by conducting semi-structured interviews with key election administration staff within the two rural municipalities. The municipal Clerks of both municipalities were interviewed as well as other key staff members that the Clerks thought might have useful information to share on the topic. These interviews with other key staff members were used as supplementary data in order to probe further into specific details that were provided by the Clerks.

Semi-structured interviews were chosen because they allowed for the incorporation of targeted interview questions to investigate the effects of telephone and internet voting in relation to the various benefits, risks and drawbacks outlined in the existing literature. Moreover, conducting semi-structured interviews was ideal as it allowed for more open-ended questions where interviewees could elaborate on their answers by introducing new factors and experiences that had not been discovered in the existing literature on large, urban municipalities. This was important since there is a gap in the literature investigating rural municipalities and semi-structured interviews allowed for the exploratory aim of filling that gap to be achieved.

#### 4.4. Sampling and Case Selection

The qualitative data on the two rural municipalities was accumulated by purposive sampling. The cases chosen for this study were selected on the basis of their similar and relevant characteristics. To define which municipalities were theoretically relevant, data was drawn from three data sets: The Rural and Small Community Measure (RSCM), the 2014 and 2018 Ministry of Municipal Affairs and Housing Data Collection Reports, and 2016 Canadian Census Comparators.

##### *4.4.1. The Rural and Small Community Measure (RSCM)*

To identify rural municipalities, the classification scheme used by the Ontario Ministry of Municipal Affairs and Housing (MMAH) and Ministry of Finance (MOF) to facilitate the financial indicator review process was incorporated. This classification scheme organizes all 444 of Ontario's municipalities into groupings by upper-tier, lower-tier, and single-tier. Lower-tiers are further subdivided into urban and rural using the Rural and Small Community Measure (RSCM).

The RSCM is based on Statistics Canada data. More specifically, Statistics Canada divides municipalities into small geographic areas, and these small geographic areas are classified as rural if they meet one of the following conditions: they have a population density of less than 400 per square kilometre; they have a population density of greater than 400 per square kilometre but cannot be grouped with other adjacent areas to produce a total population concentration of greater than 1000; or they are not economically integrated with a population centre greater than 10,000.<sup>55</sup> A municipality is then classified as rural by calculating the

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<sup>55</sup> Government of Ontario, *OMPF 2018 Technical Guide*, Toronto, ON: Ministry of Finance, 2018.

proportion of the municipality's population residing in areas classified as rural in relation to the municipality's total population.<sup>56</sup> Excluding districts in Northern Ontario, the RSCM identified a total of 170 lower-tier rural municipalities in Ontario.

#### *4.4.2. Ministry of Municipal Affairs and Housing 2014 and 2018 Data Collection Reports*

To determine which two municipalities were to be chosen as case studies, the 170 rural municipalities identified using the methods above needed to be filtered so that only the municipalities that solely used telephone and internet voting remained. Of those 170 municipalities, many did not use telephone and internet voting in 2018 or utilized it in combination with other voting methods. Thus, to isolate and identify the relevant cases (e.g. rural municipalities that only use telephone and internet voting), the study relied on the data collection reports gathered by the Ministry of Municipal Affairs and Housing for the 2014 and 2018 elections. These reports were useful for the purposes of this study as they identify the voting methods used by every municipality that ran an election in Ontario. The result was 137 municipalities that had used solely telephone and internet voting in the 2018 municipal elections.<sup>57</sup>

Next, it was important to examine both the 2014 and 2018 reports to strategically select two municipalities: one that had first adopted telephone and internet voting in 2014, and the second that had first adopted it in 2018. The logic of this case selection was to determine whether there is a significant difference in the effects that telephone and internet voting has on election administration in rural municipalities after having used the method in a prior election. In other

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<sup>56</sup> Ibid.

<sup>57</sup> Government of Ontario, *2018 Municipal Elections: Post-Election Summary* by MSO, Toronto, ON: Ministry of Municipal Affairs and Housing, December 28, 2018, 1.

words, this was incorporated into the sampling selection to investigate whether a rural municipality that had adopted telephone and internet voting for previous elections experienced different effects in election administration in 2018. For example, as depicted already, it is theorized that after adopting telephone and internet voting, costs should be reduced after the first year. Thus, after an examination of the 2014 and 2018 MMAH data collection reports, it was evident that a total of 59 of the municipalities who used telephone and internet voting in 2014 ran elections that solely relied on telephone and internet voting again in 2018.<sup>58</sup>

#### *4.4.3. 2016 Canadian Census Comparators*

Finally, to ensure that the two municipalities being compared were as similar as possible, the list of municipalities to solely use telephone and internet voting for the first time in 2018 was compared to the 59 municipalities that had ran telephone and internet voting elections in 2014 and continued to do so in 2018. More specifically, various comparators from the 2016 Canadian Census such as population, population density, land area, and percentage of the municipality employed in the agriculture sector were examined to identify two municipalities that were the most similar. The indicators chosen were selected due to their ability to further indicate a rural municipality, as well as for their ability to reveal municipalities that are spatially similar. In order to ensure anonymity is maintained, these data are not presented within this paper. Nonetheless, for two municipalities to be the most similar, they had to be comparable in various census data comparators and also meet the criteria of one first authorizing the use telephone and internet voting in 2014, and the other first authorizing it in 2018. Overall, this three-step purposive

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<sup>58</sup> Government of Ontario, *2014 Municipal Elections: Post-Election Summary by MSO*, Toronto, ON: Ministry of Municipal Affairs and Housing, November 11, 2014, 1.

sampling process allowed the cases selected to be the most similar for accurate and comparable analytical purposes.

#### 4.5. Recruitment Strategy

Knowing that this research study was dependent on an examination of specific cases that fit the three-step sampling selection criteria explained in section 4.4, it was important to have a recruitment strategy in place to ensure the relevant municipalities were willing to participate. In this regard, the recruitment strategy that was utilized to complete this study was the method of promising to share the findings with the participants as an incentive to participate. This strategy proved successful, as there is minimal research available for municipalities to determine whether opting to utilize telephone and internet voting is beneficial, and as explained already, this is especially true for rural municipalities.

Furthermore, the viability of this recruitment strategy is especially timely considering the fact that many rural municipalities often lack the resources to sufficiently investigate the problems they face. In other words, the findings of this paper will accomplish much of the legwork that is necessary for rural municipal Councils to render decisions on which voting methods to utilize. Municipalities are continuously being forced to do more with less as they are responsible for providing a wide array of services but lack the taxing capacity to pay for them, and therefore, at a time when municipalities have been tasked with looking for efficiencies, the findings of this project are very meaningful.<sup>59</sup>

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<sup>59</sup> Ron Budreau, "Greying of Government," *Municipal World*, February 2006, 37.

#### 4.6. Data Analysis Strategy

Due to the fact that the research design and methodology utilized qualitative, semi-structured interviews that allowed for participants to elaborate beyond the scope of the guiding questions, the respondents provided a significant amount of information to be unpacked and discussed. Thus, to systematically analyze the data, the discussion was organized through various themes that were present in rural municipalities that used telephone and internet voting. These themes were systematically identified using a key-word comparison analysis that was capable of identifying when similar experiences were relevant and present. Ultimately, these themes allowed for the identification and systematic analysis of different patterns and trends prevalent in the use of telephone and internet voting, and therefore allowed for the determination of what the effects of solely using telephone and internet voting are on election administration in rural Ontario municipalities.

#### 4.7. Ethical Considerations

Prior to conducting the research, a research ethics application was submitted to the University of Western Ontario's research ethics board and the application was approved. To accommodate the potential concerns expressed by interviewees about the sensitive nature of their jobs and opinions about the electoral system, all interview data were anonymized so that none of the interviewees could be identified in anyway. As a further protective measure, the municipalities themselves have been anonymized. A key consideration in making these choices was to provide some job security to the interviewees. The danger was that if an interviewee said something that their Council did not agree with or appreciate, then the interviewee could experience job loss or some other form of punishment. As such, all interviewees and even the names of municipalities are anonymized throughout the paper. This was an important factor in

the development of the research design, as permission was sought and granted from the interviewees to use direct quotes in the paper as long as anonymity was maintained.

As for vulnerability concerns, consideration was given to the notion that the participants could be slightly more vulnerable due to the fact that the municipalities studied were small and rural. To elaborate, vulnerability is often caused by limited capacity, or limited access to certain opportunities and as a result, there was potential that the interviewees could feel that they were being compelled to participate in order to receive the potentially meaningful findings. In other words, because many rural municipalities lack the resources to sufficiently investigate the problems they face, there was potential that the participants may have felt obligated to fully participate in the study because of its potential to collect essential data for them without having to invest significant resources as only a one-time, telephone interview was required. Thus, to mitigate this potential vulnerability, from the outset, this research project ensured that participants were aware that their participation was voluntary, that they could withdraw from the study at any time, and that if they were to withdraw from the study that the information they provided would be destroyed.

## Chapter 5: Participant Descriptions and Data Triangulation

Given that the two selected municipalities are to be kept anonymous in this project, they will be referred to as ‘Municipality X’ and ‘Municipality Y’ in the rest of this paper. In the sections below, the participants for both municipalities are described in very general terms and at a high level not only to protect anonymity, but to provide some context for the analysis to follow. Municipality X and Municipality Y are similar on a number of dimensions. Both have a population in the range of 5,000 to 7,500 residents. Both are similar in terms of land area and

population density as the two municipalities are within overall totals of 10 square kilometers for total land area, and 4 square kilometers for total population density.

### Municipality X:

Municipality X refers to the rural municipality that adopted the sole use of telephone and internet voting for the first time in 2018. The primary interview subject for Municipality X was the Clerk who was also the Returning Officer for the 2018 municipal election. During the interview, it was revealed that the respondent had been in the Clerk's position for two years but had been in the role for just over one year at the time when the election process began. In other words, they were in the Clerk's role for approximately one year at the time when candidates could first file their nomination papers to run in the 2018 election.

As for other previous election experience, the respondent revealed that they had been employed by two other municipalities during elections but in roles other than as the Returning Officer. The respondent had been an intern who provided election support in a minimal fashion during the 2010 municipal election, and then served as support staff for the Deputy Returning Officer during the 2014 municipal election. These previous elections, of course, were both conducted using the traditional, at-polls paper ballot with a tabulator.

The respondent also revealed that there were no other support staff who helped conduct the 2018 election for Municipality X. As a result, when asked if there were any other election staff who could yield useful information in regard to the effects that telephone and internet voting had on election administration, the respondent answered 'no'.

## Municipality Y:

Municipality Y refers to the rural municipality that adopted telephone and internet voting as the sole voting method for the first time in the 2014 municipal election and authorized its sole use again for the 2018 municipal election. The primary person interviewed for this municipality was the CAO/Clerk, who also happened to be the Returning Officer for the 2018 municipal election.

This respondent revealed that they had been in their current position for just over two years at the time of the election. However, prior to this role, they had been a municipal Clerk for another two years at a different municipality and had provided elections training to municipalities for seventeen years prior to that. Overall, this individual had 21 years of experience working with municipal elections, with four of those years actually being employed by a municipality.

In terms of previous experience with telephone and internet voting, the respondent commented that they had been involved with two elections in which the municipality used solely telephone and internet voting. These years were 2014 and 2018. Moreover, the respondent highlighted the fact that through their previous training and advisory role, they also had numerous years of experience with both the traditional, at-polls voting method and the vote-by-mail voting method as well.

Finally, the respondent explained that the Deputy Clerk had helped administer the 2018 municipal election at Municipality Y. Specifically, the interviewee highlighted the fact that the Deputy Clerk had been employed by Municipality Y for both the 2014 and 2018 municipal elections that used telephone and internet voting, as well as for numerous previous paper ballot

elections. As a result, the CAO/Clerk suggested that the Deputy Clerk could yield useful information on the effects that telephone and internet voting had on election administration. Subsequently, the Deputy Clerk for Municipality Y was interviewed in order to collect supplementary data on specific details that were provided by the CAO/Clerk. This interview with the Deputy Clerk was particularly focussed on probing for specific comparisons to previous elections in the municipality.

### Data Triangulation:

Through the interview process, it was revealed that in rural municipalities the responsibility of administering telephone and internet elections is heavily concentrated with a small number of employees. Resultantly, as highlighted in the participant descriptions above, the participant data set was not as large as what was originally intended. However, to overcome any concerns with the validity of the data, it is important to note that numerous other primary sources were consulted in order to cross reference the accuracy of the data. Specifically, the responses provided by the interviewees were cross validated with various primary documents produced by the municipality. This included staff reports, minutes, and media releases. However, to ensure the anonymity of the municipality and participants is maintained, these data sources are not specifically referenced in this paper.

In addition to these primary sources, interviewees were also instructed to refer to their election files during the interview to ensure there was accuracy and detail in the responses provided, as opposed to relying on their memory to answer questions. Due to the interviewees relying on their election files, a significant amount of data was revealed despite the participant data set being limited in numbers.

## Chapter 6: Analysis and Discussion

In this chapter, the results of the interviews and other data gathered from the two municipalities is presented. It begins by addressing each of the themes identified in the research as they appeared, using the data to comment on the extent to which those themes were present and relevant in the municipalities chosen. As stated previously, these themes were systematically identified using a key-word comparison approach that was capable of identifying when similar experiences were present. The results suggest that nine themes emerged for rural municipal election administrations and each of these themes is discussed in detail below. This chapter ends with a reflection of the main takeaways that can be extracted from the analysis as they relate to the urban versus rural dynamic. In particular, this part in the chapter focusses on the differing nature between urban and rural municipal experiences with telephone and internet voting that were noticed in the nine themes.

### Theme 1: Increased Ease in Administering Elections.

The first theme that was identified in the study was that adopting the sole use of telephone and internet voting significantly increased the ease of administering elections for municipal staff. At a general level, the data suggest that telephone and internet voting made the administration of the municipal elections process smoother and more straightforward compared to the traditional method or to what was originally expected. This was especially true for the Clerk of Municipality X who did not have a significant amount of previous experience running municipal elections. This respondent stated:

*“overall I found [the use of telephone and internet voting] to be a successful experience considering it was the first election I ran as the Returning Officer. It made the process easier for me having been the Clerk for just one year before candidates could actually file their nomination papers. I had anticipated that it would be overwhelming and stressful, but telephone and internet voting made it much smoother than I anticipated it was going to be.”*

Similar sentiments were expressed by the CAO/Clerk in Municipality Y. Even though the respondent had more experience with running municipal elections, they stated that telephone and internet voting “helped administering the election a lot. It made it simpler, especially with a good [voting technology] service provider. When the service provider does not encounter any issues or struggles, it makes things much easier and smoother on the municipality.”

Furthermore, the CAO/Clerk highlighted the fact that preparations for the election in 2018 were much easier because the municipality was using the same service provider it had used in 2014. As a result, the respondent felt that the municipality knew what to expect and explained that the service provider ensured that the municipality had all the necessary policies and procedures in place to make sure that telephone and internet voting was successful. This finding is consistent with and supports those scholars who are supportive of these voting methods as the respondents believed that the administrative benefits should accrue to the municipalities over time due to learning, experience, and the building of soft infrastructure to support these voting methods.

Importantly, interviewees provided further insight by identifying some specific ways that telephone and internet voting made election administration simpler and easier to do. The main reason provided was that telephone and internet voting allowed the municipality to spend significantly less time advertising for, hiring and training outside elections staff to work at the polling stations. For example, the Deputy Clerk in Municipality Y compared the use of telephone and internet voting methods to her numerous years of previous experience with traditional, at-polls elections and explained that,

*“the biggest difference in my experience is that the municipality is not required to spend the time advertising for elections staff and then hiring and training them. And then also not having to*

*make sure that on voting day they show up and do the job is a factor as well.”*

According to the respondents from both municipalities, one of the most cumbersome aspects of running a municipal election with traditional, at-polls voting is the staffing issue. Therefore, when the need for this requirement is eliminated, it can reduce the overall amount of time required to be spent on administering the election. In other words, telephone and internet voting seems to mitigate this problem.

Further evidence of this effect is found in the following quote from the Clerk of Municipality X:

*“from an administrative standpoint, significantly less hours were needed to be put in compared to when volunteers are required to be trained [to work at polling stations]. There were not too many different types of problems that needed hours to be put towards with the new voting system. Overall, most of the hours were spent on maintaining the Voter’s List.”*

In short, both municipalities required less staff time to be invested in running their elections under telephone and internet voting. Even though substantial time was still required to maintain the Voter’s List, this is a problem that is prevalent no matter what voting method is used.

## Theme 2: Much Faster and More Accurate Election Results

The data from the two municipalities also confirmed that results were calculated much faster and were found to be more accurate compared to previous elections. Specifically, when asked about the duration of time it took to calculate the results, the Clerk in Municipality X commented that “you cannot even compare how much quicker [calculating telephone and internet results] is to counting paper ballots.” The respondent elaborated on this statement by explaining that in discussions with the previous Clerk, it was revealed that vote counting took roughly three hours for the 2014 election. In comparison, the respondent described vote counting

in the 2018 election as “instantaneous” as there was no waiting period whatsoever from the closing of the polls to generating the results.

Similar results were obtained from the Municipality Y data. According to the CAO/Clerk,

*“the process was so fast. With the election, the Clerk has a duty of making sure that for security reasons no one is getting into the system to calculate the votes sooner. But once the [voting] period has ended, the Clerk can close the polls and obtain the results in seconds. So, the only reason why access to the results would be delayed is if the municipality had a line up of people waiting to vote at the voter help kiosk.”*

Drawing from her experiences with previous elections, the Deputy Clerk echoed these sentiments as well, mentioning that in the 2018 election, the polls closed at 8:00 p.m. and the results were announced before 8:30 p.m. According to the Deputy Clerk, this period between polls closing and the announcement of the results was “much quicker” than what typically occurred in previous elections using paper ballots. Thus, it is evident that with telephone and internet voting, both of the two rural municipalities experienced a much faster official ballot tabulation as was similarly described in the literature review. In other words, both municipalities found that telephone and internet voting was more efficient for election administration.

As for the accuracy of the results, both municipalities reported positive experiences. In Municipality Y, the CAO/Clerk explained that there was “not much of a need to double check [the results] as the system comes up with the same numbers.” The respondent elaborated that the need for a re-count of the votes is eliminated with telephone and internet voting and that this is highly beneficial for municipal election administrations. Moreover, when probed on this issue further, the respondent commented that the municipality received no questions from candidates or constituents about the potential for the results to be inaccurate.

Likewise, in Municipality X the Clerk remarked that “there were no questions received about the accuracy of results even despite having multiple close races.” The respondent expanded on this point by commenting that the lack of questions received about the final results made administering the election easier as a first time Returning Officer. Overall, the results suggest that telephone and internet voting methods provide more reliable, faster, and more accurate tabulation of the election results by eliminating human error from the process. Subsequently, this had the benefit of an increased level of efficiency in election administration for rural municipalities.

### Theme 3: Minimal Cost Savings

Another theme that was identified in this research project was that there were only minimal savings experienced by transitioning to telephone and internet voting. For example, when describing the overall costs of elections in Municipality X, the Clerk explained that,

*“every year \$10,000 are put away in reserves in preparation to cover election costs, and during the budgeting process for the 2018 election we relied on the 2014 number. What was found was that in the 2018 election there was a fifty-dollar difference in costs, so they were approximately the same as in 2014.”*

From this description, it is evident that Municipality X experienced only minimal savings in using the new voting methods when compared to the previously used traditional, at-polls voting method. The respondent speculated that one of the reasons why the costs between 2014 and 2018 were so similar may have been because “the municipality did a lot of advertising due to the drastic change in voting method.” If this statement is true, then likely the long-term costs should be dramatically less, consistent with what the supporters of these methods have argued in previous literature.

Through the interviews with the respondents for Municipality Y, it was revealed that similarly, there was a slight increase in the amount of money spent on advertising and training during the transition to telephone and internet voting in 2014 but that there was only a small reduction in the amount of money needed in 2018. This was evident when the Deputy Clerk commented that:

*“advertising was not a major cost for a small municipality like this one. In a comparison of 2010 to 2014 when telephone and internet voting was first used, the municipality saw a slight but not significant increase in the amount of money spent on advertising. However, the costs between 2014 and 2018 were roughly similar as there was just a small reduction in the amount of money needed to be spent on training people how to vote.”*

Thus, it is visible that the overall costs related to advertising for telephone and internet voting in the second year are comparable to that of the first. Additionally, it is also noticeable that the costs for training and advertising are similar to that of any other voting method for rural municipalities.

This notion of similar costs was reinforced by the CAO/Clerk for Municipality Y. Specifically, when speaking about the 2018 municipal election, the CAO/Clerk mentioned that “the costs were similar to the 2014 election as the municipality used the same service provider. The service provider had price increases, but these increases were in line with inflation increases.” In short, no major decreases in costs were seen for the municipality in their second experience with telephone and internet voting despite what was theorized in the literature. When asked why this was the case, the CAO/Clerk from Municipality Y speculated that there was still a need for advertising and training in 2018. In particular, the respondent stated that,

*“constituents still came in [to the voter help kiosk] and said that they did not remember that telephone and internet voting was used in the previous election cycle. There were constituents that were new to the municipality that did not vote with telephone and internet voting, and there were constituents that did not vote at all last election. So, there is still going to be a need for training and advertising in any municipal election in general because of the voter turnout and*

*unawareness level. This is especially the case when the voting method is different from what residents just went through in the Provincial Election.”*

From this, it is evident that advertising and training is required for any municipal election. Both municipalities had stated that the largest cost was the voting technology itself, and whether a reduction in advertising and training expenses is experienced or not, it is not a significant portion of the costs for rural municipalities. Resultantly, it is speculated by the researcher that the reason why the costs were so similar to previous elections that used paper ballot voting may be because the costs associated with having polling stations are not as significant in small, rural municipalities. In particular, most rural municipalities only offer one to three polling stations, so the costs that are saved from not having to hire outside staff are replaced with the cost of purchasing the voting technology. Likewise, due to the lack of awareness of municipal elections in general, advertising and education costs remain roughly the same no matter what voting method is used. Therefore, the adoption of telephone and internet voting for rural municipalities does not result in any meaningful cost savings, thus supporting the views of critics rather than supporters of these voting methods.

#### Theme 4: Reduction of Ballot Errors While Still Allowing for Spoiled Ballots

In terms of reducing ballot errors and spoiled ballots, the interview data from the two municipalities confirm that this theme was experienced by both rural municipalities. Proof of this theme can be extracted from the nearly identical responses that were provided by the Returning Officers in each municipality. In Municipality X, the Clerk commented that,

*“[the municipality] had the ability to work with the election delivery service provider to eliminate the ability to vote for too many candidates. However, voters still had the ability to open their ballot and not vote for anyone in order to make a statement. There was no option to vote for too many candidates, but you could still bypass certain races if you did not want to vote for anyone.”*

As for Municipality Y, the CAO/Clerk stated that,

*“constituents had the option to decline their ballots still and could still vote for only the races they wanted to. Also, they could not vote for too many candidates as this gets sorted out with the service provider.”*

Overall, these data suggest that the two election administrations had similar experiences with telephone and internet voting. Both Returning Officers found that they were able to work with their service providers to eliminate voting errors, like selecting too many candidates, and this reduced the number of ballots that needed to be removed compared to previous years.

The data also indicated that both municipalities received a low number of complaints about accidental errors being made on a ballot. In Municipality Y the CAO/Clerk stated that no complaints were received regarding candidates making mistakes on their ballot, while in Municipality X a total of two calls were received. In those two calls, the voter claimed that they did not mean to vote the way they submitted their ballot and these situations were therefore treated the same as in a paper ballot election where the constituent was unable to get their ballot back. Nonetheless, both Returning Officers highlighted the fact that the number of ballot errors was significantly reduced overall.

Additionally, with this theme it is necessary to discuss another similarity that was noticeable in both of the direct quotations above. Specifically, in the responses that were provided, both Returning Officers explained the importance of still allowing for voters to have the ability to spoil their ballot if they wanted to do so. In both cases, the Returning Officers explained that spoiling the ballot was something that the municipality was still able to offer to voters by working with the service provider. As a result, this ensured that spoiling a ballot was still an option. Therefore, it is clear that while telephone and internet voting had the effect of reducing the number of ballot errors, it still allowed for spoiled ballots to occur. Resultantly, this

was a noticeable theme in the data that can be considered a benefit to the telephone and internet modes of voting.

### Theme 5: Security Concerns Were Easy to Alleviate and Were Predominantly Related to Voter Help Kiosks

Generally speaking, the data suggest that telephone and internet voting in rural municipalities does not result in election administrators spending more time addressing security, fraud, or coercion concerns compared to traditional, at-polls voting. Instead, interviewees indicated the opposite. According to the Clerk of Municipality X:

*“at no point was the municipality informed of any security concerns or imminent threats.... We had a total of three questions from constituents asking about the security of the technology and it was nowhere near as big of a topic as what we had thought it was going to be. They were very simple questions asking how the municipality could prove the voting technology was safe and we were able to provide an answer to their satisfaction.”*

As for Municipality Y, similar comments were provided by the interviewees. However, there were two important differences in the responses provided to the interview questions on this issue. First, interviewees from Municipality Y believed that the security concerns were low because any scepticism toward the voting method had been alleviated with the success of the previous election that had used telephone and internet voting. Secondly, the same voting method was used across the County, which according to Municipality Y, likely alleviated concerns as well. These sentiments were noticeable when the CAO/Clerk stated that:

*“we had minimal complaints from constituents over security concerns. This was likely because the residents had used this voting method before and it worked for them. Also, it probably helped that the same service provider was consistently used across the entire County.”*

These data suggest that once a successful election is conducted using telephone and internet voting, many of the concerns regarding security can potentially go away for election

administrators. This notion was further supported by the response provided by the Deputy Clerk for Municipality Y as well. Compared to the 2014 election, the Deputy Clerk commented that,

*“there were a few more concerns when it was first adopted in 2014 compared to 2018.... The success of the 2014 election really helped remove a lot of the unease. In 2018, it was the same handful of people who raised concerns in 2014 and this was just a small number of individuals.”*

Thus, it is noticeable that any security issues that were experienced were easy to alleviate. By running a successful telephone and internet voting election in previous years, it makes election administration much more efficient for rural municipalities. This is undoubtedly a major benefit.

Additionally, with this topic of security, fraud and coercion concerns, it is vital to note that both municipalities discussed the importance of taking extra precautions around ensuring ballot integrity at their voter help kiosks. The majority of individuals using the voter help kiosk in both municipalities were constituents who had voted independently in many previous elections using paper ballots. As a result, this previous experience created an increased importance in ensuring that the constituents were aware that the secrecy of their vote would be maintained. For example, in Municipality Y, the CAO/Clerk explained that,

*“voter help kiosks were strategically set up so that no one else behind the voter could see the ballot. There were times where the dedicated election officials would see how constituents voted so they could help them vote, but this was not a concern since it was only the election officials doing this which would be no different than a paper ballot election.... The most important piece to the kiosks for us was communicating to the individuals that as an election official I have taken an Oath of Secrecy and will not disclose how you voted.”*

In essence, extra precautions were taken to overcome any security concerns related to telephone and internet voting at voter help kiosks.

Evidently, these same precautions were taken in Municipality X as well. The Clerk explained that the primary concern going into the election was that certain residents or candidates might offer to help other individuals vote and that this could lead to coercion in the voting process. However, the respondent explained that the municipality took extra precautions

and promoted the security and secrecy of the voter help kiosk that was set up in the Municipal Office through an aggressive advertising process. As a result, this allowed many residents to take advantage of the service and consequently, eliminated the original concerns that the municipality had with security and coercion. In short, security issues did not seem to be a major problem for or preoccupation of municipal election administrators and any concerns that were present were easy to alleviate.

### Theme 6: Multiple Options, Longer Voting Periods and Backup Plans Eliminated Technical Issues

The sixth theme that was identified in the data is that with the telephone and internet voting methods most technical issues can be avoided. In particular, it was noticeable in the study that both municipalities emphasized how technical issues are not a major concern since with telephone and internet voting there are multiple ways to vote, and there is generally a longer period of time to vote. For example, the CAO/Clerk of Municipality Y explained that,

*“no technical issues were experienced in both 2014 and 2018... With the ability to spread the vote over a week with advanced polls, and where people can vote 24/7, even if the internet was down it would have been easy to accommodate. The fact that if the internet went down people could still use their landline created other options and this eliminates any issues.”*

These similar experiences also occurred in Municipality X as the Clerk commented that,

*“once voting opened there were no technical issues that occurred. There were no power outages and no internet connectivity issues for people voting at the kiosk. Since the voting period was a week long, constituents could always come back the next day if they needed the kiosk.”*

Overall, when comparing the two municipalities, neither one had experienced any sort of technical concerns, thus providing support for literature that advocates for the adoption of these types of voting methods.

Part of the reason, perhaps, for the lack of concern about these technical issues among the election administrators is that they had developed contingency plans which they ended up not

having to use in the elections. For example, the Clerk in Municipality X commented that “the issues that are out of [the municipality’s] control just require a back up plan such as extending the voting period and doing what you can to accommodate. It may seem stressful at the time, but it is manageable.” Likewise, in Municipality Y, the CAO/Clerk explained that they did take extra steps by purchasing backup internet so that the voter help kiosks were not solely reliant on just the WI-FI in the room. The respondent explained that the municipality never encountered a situation where the backup internet was required or where the phone lines went down, but they felt more comfortable with the fact that this contingency plan was in place in case any technical issue occurred.

Finally, one comment that was particularly insightful also came from the CAO/Clerk of Municipality Y. Specifically, the respondent stated that,

*“due to the fact that other options to vote were available, for a technical issue to occur it would have to be a catastrophic event. If this were the case, this would have the same impact on a paper ballot election.”*

Thus, while most technical issues can be eliminated with telephone and internet voting, any major issue beyond the municipality’s control that does occur would likely be one that would also impact a traditional, at-polls election. This is a significantly impactful finding as it highlights the fact that in the theoretical literature the technical issues that can arise from transitioning to telephone and internet voting may be overstated. Resultantly, being able to eliminate most technical issues through providing multiple voting options and longer voting periods was a predominant theme in the research. Consequently, this is a meaningful effect for rural municipalities in Ontario that are considering the adoption of telephone and internet voting.

## Theme 7: Effects on Accessibility Were Positive

As discussed previously, one of the risks identified in the literature was the potentially negative effect of telephone and internet voting on the accessibility of elections. Some scholars argued that it would increase accessibility for many segments of the population while others said it would create a digital divide in the voting system. However, the results from the two rural municipalities suggest that accessibility was improved as a result of telephone and internet voting. This is evident through the direct experiences of the two municipalities. In Municipality Y, the CAO/Clerk commented that,

*“we heard more positive feedback regarding accessibility compared to negative feedback. There was significant feedback explaining that they found it much easier to vote based on where they were, particularly because the municipality held advanced polls.”*

Moreover, this was expanded upon by the respondent as a specific scenario was discussed. In particular, the CAO/Clerk described how the municipality received positive feedback from a 92-year old woman who was very happy that she was able to vote from the comfort of her own home given that attending a polling station would have been physically difficult for her. The respondent explained how the resident was very appreciative, and that this reflected the positive effects that telephone and internet voting can have on accessibility.

While the respondent did not specify whether a telephone or the internet was used to cast the vote, this is nonetheless evidence that accessibility can be improved via telephone and internet voting. Importantly, this finding contradicts the argument in the literature that age is an important demographic for the digital divide. In this case, age was not a barrier and instead of disenfranchising the voter, technology had the opposite effect, making election administration easier. This is beneficial for municipal election administrations.

As for in Municipality X, similar positive experiences with accessibility occurred. The Clerk explained that a small number of comments were received from constituents who did not have access to a computer or phone and were unable to vote. However, the respondent described that in these cases, the constituents were accommodated by offering them telephone voting or internet voting at the voter help kiosk that was set up in the Municipal Office. According to the Clerk:

*“Having the voter help kiosk set up in the office was definitely beneficial to overcoming accessibility and allowing for the Oath to help assist [constituents] in voting. Overall, I only received a handful of comments about accessibility and they were all related to the person not having the required internet technology. We made extended hours at the kiosk available for both voting and voter registration in order to ensure accessibility, and this helped address any concerns.”*

Thus, it is undoubtedly evident that the digital divide had a minimal effect on the accessibility of the election. Importantly, as seen in the response from the Clerk, offering extended hours at the voter help kiosks can allow for accessibility to be positive as well. For example, if an individual does not have access to the technology and is unable to attend the kiosk during regular hours, this would be disenfranchising. However, because the municipality extended their hours, any comments received regarding the lack of the required technology were able to be accommodated and this makes accessibility positive.

Finally, the interviewees suggested that accessibility was improved through the positive effect that telephone and internet voting had on proxy voting. Specifically, the CAO/Clerk of Municipality Y explained that telephone and internet voting eliminated the need for proxy voting in the municipality as greater access was created for a longer voting period. Resultantly, individuals could vote from anywhere at any time, and this eliminated the need for constituents to go through the process of obtaining a proxy voter and having them attend a polling station and vote for them. The CAO/Clerk stated that “the fact that telephone and internet voting methods

take away the need for proxy voting shows that the system is much more accessible.” In other words, the elimination of proxy voting is a clear indicator of increased accessibility.

### Theme 8: Voter Education Is Necessary and Will Always Be Required

The eighth theme that was identified in the study was that voter education is necessary and will always be required for any municipal election. In particular, it was found that in both municipalities, there were constituents who were unaware of the change that was made to adopt telephone and internet voting. For example, in Municipality X, the Clerk explained that,

*“there were numerous constituents who were wondering where the ballot box and their polling station was to try and cast their vote with their voter information letter. [The municipality] found that despite the education that was provided, going to a polling station is just a habit for many residents.”*

Likewise, for Municipality Y, the Deputy Clerk explained that in 2014, “there were some comments that voters were unaware of the voting method change despite advertising. This did not occur as much in 2018 though, but still to a degree.” Thus, voter education remains a challenge for both municipalities.

Furthermore, it was also revealed that not only was voter education necessary when transitioning to telephone and internet voting, it remains necessary for any municipal election regardless of the voting mode used. As described earlier with respect to municipal cost savings, training and advertising in any municipal election is always needed because of the consistently low voter turnout and awareness level. Both of the Returning Officers highlighted the fact that no matter what voting method is used, education will always be required to inform voters of how and when to vote. Specifically, the CAO/Clerk for Municipality Y explained that in 2018, voters still came into the Municipal Office unaware of the transition to telephone and internet voting despite it being used in 2014. The respondent explained that “for small municipalities such as

this one, there is not a lot of media coverage like there would be for a larger municipality. People are unaware of an election occurring, let alone a change in voting method.” Thus, it is noticeable that for small, rural municipalities, not only is voter education necessary, it will always be required for any election.

### Theme 9: Issues with Voter Registration Stem from Voter’s List, Not Telephone and Internet Voting

In terms of voter registration, the data suggest that any problems relating to this issue did not stem from the adoption of telephone and internet voting, but instead were directly related to the Voter’s List. Election administrations in both rural municipalities had strikingly similar answers, highlighting the fact that getting residents added to the Voter’s List on the final day of the election was a fairly easy process. Both respondents explained that they had many constituents arrive at the Municipal Office to register to vote on the last day, and that all that was required was issuing a PIN number similar to a traditional election. The Clerk in Municipality X commented that “the individual would be able to vote within minutes,” thus depicting the ease of the process.

However, when discussing the details of voter registration, both respondents had specifically mentioned that any issues that did arise were the result of problems with the Municipal Property Assessment Corporation’s (MPAC) generation of the Voter’s List. In particular, it was explained that the largest concern with voter registration was with problems maintaining the Voter’s List that was developed by MPAC. In other words, while getting constituents registered to vote was an easy process on voting day, it had to be done numerous times due to the problems associated with the Voter’s List. In short, telephone and internet

voting had no noticeable effect on voting day registration compared to the traditional method of using paper ballots.

### Rural Versus Urban Effects

With the nine themes in the data depicted, it is also vital to discuss the noticeable differences between the effects that telephone and internet voting methods have on rural municipalities in comparison to urban municipalities. As was depicted throughout the nine themes above, it can be concluded that the urban research findings are relatable to the rural context, but only to a certain extent. In other words, a significant portion of the urban experiences are similar in rural municipalities, however there are also rural-only experiences that urban contexts would and do not encounter.

As was illustrated, the adoption of telephone and internet voting tended to be a positive experience overall for rural municipalities, similar to that of the City of Markham and the City of Halifax. Likewise, just as urban municipal election administrators found telephone and internet voting to be more accessible, convenient, and easier to use, these effects were present for rural municipalities as well. Moreover, in both the urban and rural experiences, advanced polls were regarded as an important component that create more accessibility in the municipal election process.

Furthermore, similar effects were experienced in regard to security concerns and technical issues. Both the urban and rural municipalities experienced minimal security concerns or technical issues, and perhaps this can be attributed to the longer voting period, more options to vote, and the presence of some form of voting assistance as well. In the urban research findings, it was found that call centres helped alleviate the concerns and also reduce the overall costs of

the election. Likewise, the rural municipalities opted to provide voter help kiosks, and as was highlighted above, this was a significant tool utilized to help minimize any concerns.

In contrast to the urban research findings, an important rural-only experience is related to costs. While the urban municipalities found that telephone and internet voting created a significant cost savings and would allow for a reduction in the number of polling stations in subsequent elections, this did not occur for rural municipalities. Instead, rural municipalities found themselves budgeting the same amount as previous traditional paper ballot elections. In general, the data suggests rural municipalities tended to experience a decreased level of media coverage and awareness of the election, and therefore this created an increased need for costs related to educating the constituency. In urban municipalities, perhaps a portion of these advertising costs are covered through newspaper articles being written by the local media, but this same experience does not occur for rural municipalities.

Moreover, an interesting finding in the urban-rural dynamic is the number of polling stations that get eliminated when switching to telephone and internet voting methods. For urban municipalities, the data suggest that a significant number of polling stations can be eliminated, and therefore, a significant portion of the costs related to staffing those polling stations can be eliminated as well. However, for rural municipalities, the data suggest that the number of polling stations being eliminated is of a much smaller number than in an urban setting, and perhaps this is why only a minimal cost savings is experienced. Thus, it can be concluded that the urban research findings are relatable and generalizable to the rural context, but only to a certain extent.

## Chapter 7: Conclusion, Recommendations and Limitations

### Conclusion

In conclusion, the literature written on telephone and internet voting and the effects it has on rural municipalities in Ontario was undoubtedly an area of research that needed to be addressed. As stated throughout this research paper, the literature was primarily written on large, urban municipalities, and this is problematic with so many municipalities of all sizes transitioning to the adoption of telephone and internet voting. However, through the data collection and analysis in this research project, it is strongly believed that the gap in this area of study is starting to be filled. Specifically, this project has taken the first steps towards thoroughly investigating how telephone and internet voting effects small, rural municipalities in Ontario. Through this exploratory research, it is now known what rural municipalities are likely to experience if they are to adopt telephone and internet voting as the sole voting methods in their municipality. Particularly, it is now known that telephone and internet voting methods have many effects on election administration.

Overall, the adoption of telephone and internet voting appeared to be a positive experience as the risks were not as prevalent as what was described in the theoretical literature. Moreover, it was noticeable that a significant portion of the exploratory findings related to election administration were similar to the positive experiences that occurred in the large, urban empirical case studies of the City of Markham, and the City of Halifax. This is especially the case when discussing the effects that telephone and internet voting had on the ease of administering elections and the increased accessibility. Nonetheless, there were still major differences in the effects when compared to large, urban municipalities, thus indicating that the urban research findings are only relatable to a certain extent. This was most noticeable through

the discovery that there were only minimal cost savings experienced for rural municipalities. In other words, the adoption of telephone and internet voting in rural municipalities clearly has both its similarities and its differences to urban municipalities.

Additionally, the study revealed some very meaningful exploratory findings for rural municipalities looking to adopt telephone and internet voting. For example, it was discovered that accessibility was improved as the necessity for proxy voting was eliminated, and also that the potential for technical issues was largely a non-factor due to the municipality providing multiple options to vote as well as a longer timeframe to vote. However, it was also discovered that the adoption of telephone and internet in rural municipalities is not without its drawbacks. Specifically, it was revealed that the major issue with telephone and internet voting is that a significant amount of voter education is required, and that even then it does not always make a significant difference in making constituents aware of the change to telephone and internet voting. Resultantly, this can cause an increased burden for rural election administrations when they are forced to spend time dealing with this lack of awareness. However, overall, when investigating the experiences of telephone and internet voting in rural municipalities, it can be concluded that the effects as they relate to election administration are largely positive.

### Recommendations and Limitations

There are many ways that the research can progress in order to build off of the work that was conducted in this study. Specifically, one option would be to develop various deductive, hypothesis-testing frameworks that seek to test some of the exploratory findings that were revealed in this project. This research would be particularly useful for determining why the various effects occur for rural municipalities. While this was an area that was slightly speculated on by the researcher in the analysis and discussion section of this report, the nine distinct effects

could all be investigated much more in depth. For example, a framework could be developed to test whether the small number of polling stations required in rural municipalities compared to urban municipalities is what causes minimal cost savings to occur when adopting telephone and internet voting.

As stated when discussing the scope of this research project, the intent of this paper was to collect the initial empirical descriptions and findings on the understudied topic so that future research can refine the issues identified for more systematic investigation and formulation of new research questions. Thus, by opting for explanatory, deductive research in the future, this would be in line with what the goal of this project was.

Another recommendation for future research would be to expand on the exploratory investigation of the effects that telephone and internet voting has on rural municipalities in Ontario. Specifically, this research project narrowed the scope of the investigation to only examine the effects as they relate to election administration. Future research might examine the impact of these methods on constituents and candidates running for office. While it is noticeable that the adoption of telephone and internet voting was overall a positive experience for elections staff tasked with administering the election, perhaps this was not the case for the other stakeholders involved. Thus, this future research is important for any rural municipal Council looking to render a meaningful decision on the future of telephone and internet voting in their municipality. To make an informed decision, the full list of effects from all sides must be obtained, but in its current state, only the effects on election administration have been collected through empirical case studies. Knowing this, the other stakeholders must be empirically studied as well.

Future research might address another limitation of this study, which was that it only was able to complete a small number of interviews. Much to the surprise of the author, it was found that telephone and internet elections in rural municipalities were predominantly conducted by only one or two staff members. Thus, by combining the opinions and experiences with other election stakeholders such as candidates and constituents, a more thorough investigation may be achieved, and an increase in the generalizability of the findings will be reached.

The final recommendation for future research stems from another limitation of this study. Specifically, this study was limited in its case selection as only rural municipalities who had recently adopted telephone and internet voting were available to be investigated. Unlike many of the large, urban municipalities who adopted telephone and internet voting over a decade ago, there were not as many readily available cases for rural municipalities. Due to this fact, a recommendation for future research would be to consider the development of a longitudinal study to investigate whether the effects of telephone and internet voting on election administration persist over a longer period of time. It is possible that the effects on election administration change after a municipality has used telephone and internet voting for numerous elections, and knowing this, future research should build off of the work in this study and venture into this area. By doing so, a more thorough understanding of the effects that telephone and internet voting has on rural municipalities will be able to be achieved.

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