Exploring Factors Influencing Vote-by-Mail Turnout in Hamilton: A Comparative

Analysis of Municipal and Federal Elections in Ontario

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Abstract

In 2022, the City of Hamilton implemented Vote-by-Mail (VbM) as an alternative method for voting in municipal elections for the first time. The aim of introducing VbM was to enhance accessibility within the democratic process by removing barriers such as transportation and the impacts of the weather. However, Hamilton experienced one of the lowest municipal VbM turnouts in Ontario with only 1.7% of voters utilizing the alternative method for voting. This study aims to find out why Hamilton had such a low VbM turnout rate by employing a three-tiered analytical approach to analyze VbM in municipal and provincial elections across Ontario, focusing on Hamilton's comparison with other cities such as Toronto and Guelph. The research asserts that the main reason for Hamilton's low VbM turnout is due to the administration of VbM as well as the lack of resources available. This research recommends that in order for the City of Hamilton to address the challenges it faced in implementing VBM, it should implement a longer VBM registration period along with implementing an email marketing service, as well as conducting VBM campaigns to raise awareness and educate voters about the VBM process.

Keywords: Vote-by-Mail, VbM turnout, municipal elections, accessibility, barriers, administration, resources, Ontario, Hamilton, Toronto, Guelph

Exploring Factors Influencing Vote-by-Mail Turnout in Hamilton: A Comparative

Analysis of Municipal and Federal Elections in Ontario

In 2022, the City of Hamilton introduced Vote-by-mail (VbM) as a voting method available for municipal elections. VbM emerged as a critical component in ensuring accessibility within the democratic process. As traditional voting methods transform to accommodate diverse needs and circumstances, the significance of mail-in voting becomes increasingly pronounced. In principle, this method of voting extends the opportunity to participate in elections to a broader spectrum of citizens.

In order to vote using VbM in Hamilton, voters are required to sign up to receive a VbM package either online or by phone (City of Hamilton, 2022). Voters then receive a voter registration kit which includes an instruction sheet, a ballot, a voter declaration form, an inner secrecy envelope and a return envelope (City of Hamilton, 2022). Voters are then required to either mail the ballot using Canada Post or drop it off at a designated drop-off location and ensure it arrives before election day to have their vote count (City of Hamilton, 2022).

Although this process is meant to be seamless, the city of Hamilton experienced some difficulty in ensuring smooth logistics and had a very low VbM turnout. As such the city of Hamilton provides a compelling case study for examining the role and impact of vote-by-mail systems. This study examines how Hamilton's mail-in voting system compares with that of other cities in Ontario. This research aims to analyze why Hamilton has one of the lowest VbM percentages in Ontario with only 1.71% of voters in the 2022 municipal election choosing to utilize the voting method (City of Hamilton, 2023).

The following study undertakes a progressively detailed analysis of municipalities implementing Vote-by-Mail (VbM) in the 2022 election. It focuses on the nuanced differences in administrative practices and their impact on voter engagement and turnout. Initially, our broad analysis encompasses all 77 Ontario municipalities, identifying the general adoption of VbM. We then narrowed our scope to 21 towns that utilized VbM non-exclusively, setting aside the 56 that conducted their elections entirely via VbM. This refined focus enables us to have a closer look into the intricacies of VbM systems, contrasting their approaches with municipalities that also provided in-person voting options. The culmination of our investigation zooms in on three specific municipalities—Toronto, Hamilton, and Guelph—selected based on their adherence to congruence criteria, facilitating a direct comparison of VbM uptake and the effects on voter confidence and participation.

The case analysis found that there were two main components of the VbM system across Ontario that possibly affected VbM turnout: the administration of VbM and the allocation of resources. The research found that the more voting methods available for voters and higher population density, the lower the utilization of VbM. Furthermore, the research found that in all cases (Hamilton, Guelph and Toronto) VbM percentage was much higher federally than municipally. This gap between federal and municipal VbM percentages can be explained by the unequal resource allocation available to federal election bodies including financial and human capital.

Through a thorough examination of these factors, this research aims to provide valuable insights into the challenges and opportunities surrounding VbM implementation, ultimately

contributing to the enhancement of electoral accessibility and participation in Hamilton and

beyond.

Literature Review

Exploring Vote-by-Mail (VbM) systems is a chapter within the broader narrative of

electoral systems and voting accessibility. This investigation highlights VbM not only as a

pivotal mechanism intended to enhance democratic engagement but also as a subject of varying

administrative practices across jurisdictions. Research and grey literature elucidate the

significant disparities in VbM administration, such as the exclusivity of its use, the distribution

of voting kits (automatic versus on-request), timing constraints, and procedural specifics. These

variations play a crucial role in shaping the electoral experience and, as detailed in our focused

analysis, reveal the broad spectrum of VbM administration within Ontario municipalities.

In dissecting the implications of VbM, it becomes evident that this voting modality presents both

potential benefits and challenges. From an administrative perspective, VbM can vary in cost-

effectiveness based on the intricacies of its implementation. Regarding accessibility, VbM

notably serves geographically vast or remote areas, offering a voting solution for demographics

such as the elderly, physically disabled, and individuals unable to attend polling stations due to

travel or residency away from their registered address. The advent of the COVID-19 pandemic

has further spotlighted VbM for its ability to mitigate safety and security concerns, providing an

alternative to physical polling locations. However, this modality introduces a timing dilemma,

necessitating early vote casting and precluding changes in voter preference as campaigns evolve.

Trust issues and a need for more public understanding of the process outline the challenges

facing electoral management bodies (EMBs) in fostering confidence in VbM systems.

Our examination draws on a diverse range of sources, including a seminal study by McGhee et al. (2023), which identifies an increase in voter turnout attributed to the distribution of VbM kits. This insight is particularly relevant to our sub-hypothesis that access to VbM correlates with higher voter participation rates. The Association of Municipalities of Ontario (AMO, 2022) offers a comprehensive overview of municipal election practices, enhancing our understanding of VbM's role across various jurisdictions.

Specific case studies, such as those from the City of Hamilton and Toronto, provide practical examples of VbM's implementation and its intended effects on voting accessibility and the overall electoral process. Guelph's distinctive approach and its reported success with VbM return rates further enrich our analysis, highlighting the importance of adaptability and innovation in electoral strategies to improve voter engagement.

In synthesizing these insights, our research endeavours to present a narrative that transcends the binary discussion of VbM's merits and drawbacks. By situating our analysis within the Ontario context and drawing parallels with global practices, we aim to contribute meaningfully to the discourse on electoral accessibility and the evolution of democratic institutions in response to societal shifts and technological advancements. Through this lens, we examine the interplay between administrative frameworks, technological interventions, and the imperatives of democratic inclusion, thereby enriching the scholarly understanding of VbM's role in modern democracies and informing future policy and administrative strategies.

The effectiveness of VbM systems in enhancing voter participation is closely linked to their administration methods. Research by the Public Policy Institute of California (2021) and further studies by the Vote at Home Organization (2023) highlight a significant relationship

between the accessibility of VbM systems and voter turnout. These studies specifically note that

when VbM kits are distributed to all eligible voters, a noticeable increase in voter participation is

observed. For instance, a universal distribution approach was associated with an increase in

turnout of at least 4% among all voters. This effect was more pronounced during the 2020 U.S.

elections, as the Vote at Home Organization (2023) reported, where the overall voter turnout

surged by 5.6%. Notably, the impact of universally distributed mail-in ballots was even more

substantial in areas with historically low mail-ballot usage, leading to increases in turnout by as

much as 8%, according to findings by McGhee et al. (2023). These statistics demonstrate the

critical influence of VbM kit distribution strategies, particularly the method of sending kits to all

eligible voters, in facilitating higher levels of electoral participation. These findings illuminate

how states with automatic VbM kit distribution witness a marked rise in electoral participation,

suggesting that administrative barriers (or the lack thereof) play a significant role in encouraging

voter engagement.

     While studies highlight the positive impact of universal Vote-by-Mail (VbM) kit

distribution on voter participation, contrasting administrative strategies, such as the City of

Hamilton's approach requiring an online application to receive a VbM kit, present an opportunity

for deeper inquiry. In 2022, Hamilton reported a VbM turnout of just 1.71%, notably lower than

increases observed in jurisdictions with automatic kit distribution. This outcome, set against

Ontario's efforts to enhance electoral accessibility, raises questions about the complex dynamics

in different municipalities' VbM implementations. The high variation in turnout provides an idea

that Hamilton can improve VbM turnout. Inquiry into VbM usage can help understand the

challenges municipalities face to help inform the thesis and hypothesis (City of Hamilton, 2023;

AMO, 2023).

This study aims to conduct a detailed comparative analysis of Vote-by-Mail (VbM) implementation across municipalities like Hamilton, Toronto, and Guelph, focusing on the nuanced differences in administrative practices and their potential influence on voter participation. While each city has developed its approach to VbM, reflecting distinctive administrative philosophies and community engagement strategies, it is essential to understand that variations in VbM systems sometimes indicate the absence of critical administrative components such as secure storage and defined timelines. To investigate the differences in Vote-by-Mail (VbM) administration among Ontario cities, we initially reviewed AMO data which highlighted variances in VbM execution. In our detailed examination of VbM administration in Hamilton, Guelph, and Toronto, we analyzed each city's post-election reports. This involved meticulously documenting and comparing the procedures and timelines for voters to request a VbM kit, and to complete and mail their ballots. Issues encountered during the VbM rollout were also scrutinized.

In Toronto, the VbM framework is robust, featuring comprehensive ballot security measures and clear procedural timelines. This systematic approach is part of why Toronto exhibits a relatively effective VbM administration among the cities studied. Conversely, Hamilton faced significant hurdles, such as delays in ballot deliveries and issues with voter registration cards, which were not as effectively mitigated and led to a lower VbM turnout. Guelph, despite facing similar challenges as Hamilton, managed a higher VbM return rate, suggesting some administrative efficiencies that warrant closer investigation. Toronto had a braille option available to voters who requested it, something that both Hamilton and Guelph lacked. Each city's election website was also examined to assess how VbM processes were communicated to voters, revealing differences in outreach and voter information. For instance,

Toronto's methods for engaging voters and disseminating VbM information were notably more

innovative, potentially contributing to better voter turnout. Guelphs voter website did not

mention voting instructions to be included in VbM kits, Although both Toronto and Hamilton

did mention it. The receiving of VbM kits was different in the cities as Toronto had clear

instructions that VbM kits will not be received in person while Guelph and Hamilton will. This

comparative analysis across the three cities highlighted both similarities and crucial differences

in VbM administration, pointing to the importance of flexible and well-considered administrative

practices in influencing the effectiveness of VbM systems. This comparative study seeks to

highlight that the efficacy of VbM systems is not solely determined by the presence of

standardized administrative measures but also by how these measures are implemented and

communicated to the electorate. The objective is to assess the varied administrative approaches

to VbM across these municipalities, focusing on understanding how these approaches potentially

impact voter engagement and uptake. The case of Leamington, which saw a 10% higher voter

turnout than Hamilton by automatically sending out VbM kits, provides anecdotal evidence

supporting the positive correlation between ease of access to VbM and voter turnout.

      The societal ramifications of Vote-by-Mail (VbM) systems invite detailed scrutiny,

particularly when democratic accessibility and inclusion converge with practical implementation

challenges. The key issues revolve around balancing the objective of increased accessibility with

cost, feasibility, and trust constraints. Specifically, while VbM offers the promise of broadening

democratic engagement by presenting more accessible voting options, it also raises questions

about the logistical and financial implications of such systems, their security, and the potential

impact on voter trust. The effectiveness of VbM in achieving its democratic goals thus hinges on

a nuanced understanding of these trade-offs, demanding careful evaluation of how best to

implement VbM in a manner that maximizes participation without compromising the integrity or

feasibility of the electoral process.

Overall, this literature review has undertaken a critical exploration of the Vote-by-Mail

(VbM) systems, with a particular focus on their implications for electoral turnout and democratic

accessibility within the context of Ontario's municipal and federal elections. Through an

examination of administrative effectiveness, comparative municipal strategies, and societal

implications, this study highlights the multifaceted nature of VbM systems as both a challenge

and an opportunity for enhancing democratic participation. The evidence presented reveals a

parallel between the potential of VbM to increase electoral participation and the practical

challenges that can impede its effectiveness. Studies such as those by the Public Policy Institute

of California (2021) and the Vote at Home Organization (2023), alongside the empirical

examples of municipalities like Hamilton, Toronto, and Guelph, provide a rich tapestry of

insights into the conditions under which VbM systems can flourish or falter. The case of

Hamilton, with its comparatively low VbM turnout, illustrates the pitfalls of administrative

hurdles and the crucial need for streamlined, accessible VbM processes. Contrarily, the

experiences of Toronto and Guelph, as well as the notable success in Leamington, offer valuable

lessons on the importance of tailored, community-specific approaches to implementing VbM

systems. The broader societal implications of VbM, particularly its role in dismantling barriers to

participation for marginalized and disenfranchised communities, further underline the critical

importance of this voting method in the pursuit of a more inclusive and equitable democratic

process. As this review suggests, the successful implementation of VbM systems requires a

delicate balance between security, accessibility, and administrative feasibility, underscored by a

commitment to comprehensive voter education and engagement. Ultimately, this literature

review posits that the effectiveness of VbM systems in Ontario hinges on the adoption of automatic VbM kit distribution and robust voter education campaigns. Such strategies are essential for maximizing voter turnout and ensuring that all citizens have equal access to the democratic process.

Research Design

Vote-by-mail plays a pivotal role in sustaining a vibrant democracy at every government level. How does Hamilton's vote-by-mail system compare to other Ontario cities and their systems of voting by mail? This study examines how Hamilton's mail-in voting system compares with those of other Ontario cities. Despite its low turnout in VbM relative to federal elections and other localities, Hamilton's experience can be linked to various factors such as administrative procedures, resource distribution, and voter awareness. This analysis underlines Hamilton's struggles in efficiently deploying and advocating for VbM, highlighting the necessity for enhanced resource distribution, uniform administrative practices, and targeted outreach efforts to improve VbM accessibility and awareness.

The primary aim of this investigation is to delve into the complex dynamics surrounding the use of VbM in Ontario's municipal elections. We specifically focus on the 77 municipalities that embraced VbM in the 2022 elections, employing a thorough research approach.

A dataset was formed from information sourced from a variety of municipal and federal websites, including all Ontario municipalities utilizing VbM. Through multiple analytical stages, municipalities were chosen based on criteria to shift the focus of 77 municipalities to a final three

that compare to Hamilton. The initial phase excludes municipalities offering VbM exclusively

and those without contested elections. The subsequent phase evaluates the 2018 municipal

elections, excluding locales that had previously adopted VbM. The final phase considers the

congruence of municipal and federal electoral boundaries, removing areas with non-aligned

wards. The research findings will then be assessed against the hypotheses to gauge the validity of

each assertion.

Adopting Baglione's (p. 146) methodological framework, this study utilizes a three-tiered

analytical strategy for a nuanced and in-depth examination of VbM in municipal elections. Each

level is designed to refine the focus and enhance the depth of understanding regarding VBM

usage in municipal elections.

To better understand the impact of VBM in municipalities, those offering only one voting

method (either acclaimed or solely VBM) were excluded from the analysis. This deliberate

exclusion allows for a more concentrated investigation into municipalities providing multiple

voting options. This refined group of 21 municipalities becomes the basis for an in-depth

comparative study.

The next analysis phase scrutinizes VbM's implementation in the 2018 municipal

elections, excluding municipalities that introduced VbM in 2022. By scrutinizing its presence in

the 2018 municipal elections, this level of analysis seeks to exclude municipalities that adopted

VBM for the first time in 2022. This temporal lens aims to isolate trends and patterns in VbM

adoption and utilization over time.

The final stage conducts a detailed investigation into the impact of matching federal

electoral districts to municipal ward boundaries and comparing VbM turnout. On the municipal

level, Ontario is divided into wards, while on the federal level it is divided into electoral districts. Although the municipal and federal levels do not always share the same ward boundaries, the absolute area of the combination of boundaries at times overlap in both levels. This ignites the idea that the percentages of Vote by Mail for cities that offer the option can be compared to the vote by mail of the federal election as the voting population for the municipal wards similarly fall into a set ward on the federal level giving a fair comparison. An example is with the City of Hamilton's wards which falls within five federal electoral districts that contain exclusively City of Hamilton Residents. The study investigates the correlation between municipal and federal mail-in voting rates in Ontario cities, particularly those with shared ward boundaries. This analysis aims to uncover disparities in mail-in voting participation within Hamilton compared to other municipalities. A statistically significant variance could reveal underlying causes for such discrepancies.

Multiple voting methods may cause a decrease in the number of citizens who choose to use Vote by Mail. Many Ontario municipalities are seen to use two or more voting methods for its citizens. The current assumption is the more voting methods available to a population, the less likely they are to utilize Vote by Mail. It will be tested using a crosstab grouping municipalities together based on the number of available voting methods for the 2022 Municipal Elections. The data will be compared using voter turnout and VbM usage.

A municipality's mail-in voting turnout is contingent on various factors, including system familiarity and accessibility. The longer a mail-in voting system has been in place, the more likely citizens are to utilize it, assuming they are informed about how to access mail-in ballots. This premise will be tested by comparing voter turnout with the system's longevity.

Simplifying the mail-in voting process could significantly increase voter participation. Proactively distributing mail-in ballots to all eligible voters, rather than requiring prior registration, could streamline the voting process, potentially boosting turnout. This hypothesis will be examined by comparing turnout rates between municipalities with one side providing VbM to all citizens while the other side only providing VbM to those who request it.

The data for this research will be provided primarily from government websites along with peer-reviewed literature. The factual percentages based on the 2022 elections will be provided by official government sources which have a very high assurance on all five indicators of the CRAAP* test. These sources will be the municipality websites and election teams of qualifying Canadian cities, as well as the Canadian Federal election website. It is current as the information is from the previous election in 2022. It is likewise relevant as the data pertains to the voter turnout and overall election results. The authority is given from the election offices which manage the elections. The accuracy is upheld to correctly account for every voter as well as every mail-in vote. The purpose of this source is to inform the public of the election results and the background process of each individual election. To ensure maximal integrity of sources, peer-reviewed articles and gray literature surrounding the topic will be assessed.

Our study involved drawing administrative data from multiple sources. A critical source is from the AMO to ascertain from 414 Ontario municipalities which used Vote by Mail in its 2022 election. From the 77 municipalities which remained we further required more narrowing to decide which municipalities closely relate to Hamilton based on a set of criteria. Although each municipality's election officials hold the data which was required in the analysis, it had to be pulled from multiple sources in the attempt to make a greater data set containing all the information. Voters during municipal elections, number of different voting choices, as well as

the eligible population were both drawn from AMO. The number of federal voters both those who voted and total possible voters were obtained from Elections Canada by finding each individual Federal Electoral District and combining each to make an exact overlay of the municipal boundaries. Federal election Vote by Mail was done in a similar fashion. Municipal Vote by Mail was obtained in a plurality of methods for each municipality. This involved looking through municipal meeting scripts, adding data together from municipalities open sources, viewing municipalities election websites, looking through election reports and getting into contact with city clerks. The data for if VbM was offered in 2018 was likewise found either on AMO or within cities websites/open data. Population density for each municipality was found by using Statistics Canada and compiling a list of each municipality and its density. The final section of Rural/Urban was found by viewing where a municipality was on a map and if it fell within a Census Metropolitan Area (CMA). If a municipality was within a CMA it was considered Urban, if not, Rural.

Data Analysis and Assessment

The hypothesis posits that the administration of VBM systems significantly impacts overall VBM turnout across cities. Preliminary data assessment reveals variations in VBM administration, with most municipalities, including Hamilton, following a common method of registration a month prior to the election. Discrepancies in accessibility options and the number of available voting methods are observed, potentially influencing VBM usage.

Choosing Cases for Comparative Analysis

Ontario comprises 417 municipalities each with its own municipal elections. Of these 417 municipalities, voting by mail is not as common as only 77 municipalities (or approximately 18.4%) used voting by mail in their 2022 elections. The data for the following analysis was extracted from various municipal websites, The Association of Ontario Municipalities as well as Elections Canada.

Municipality	Eligible Population during municipal election	Overall Voter turnout (%)	Voting Methods Available
Sault Ste. Marie	56889	38.5	9
Hamilton	405288	35.4	6
Guelph	104612	28	6
Toronto	1898750	29.7	6
Ottawa	722227	43.8	6
St. Catherines	101511	26	6
Waterloo	82557	27.2	5
Elliot Lake	10382	35.5	5
Kingsville	16955	50.2	4
Meaford	10595	36.8	4
Pelham	15735	32.9	4

Whitby	102618	23.3	3
Niagara Falls	68201	27.5	3
Magnetawan	3689	31.7	3
Oshawa	121885	18.4	2
London	281073	25.5	2
Milton	80367	29	2
Oro-Medonte	19839	36.4	2
Port Colborne	15852	31.6	2
Central Manitoulin	3327	40.5	2
Spanish	728	46.7	2
Leamington	18138	45.7	1
Norwich	8564	51	1
Huron	Acclaimed	Acclaimed	2
Manitoulin and the Islands	Acclaimed	Acclaimed	2
Puslinch	Acclaimed	Acclaimed	2
Whitestone	Acclaimed	Acclaimed	4

Mapleton	Acclaimed	Acclaimed	3
St. Clair	12555	39.3	1
Tiny	19162	33.6	1
West Nipissing	13820	48.3	1
Admaston/Bromley	3160	41.8	1
Alberton	743	47.5	1
Armour	Acclaimed	Acclaimed	1
Assignack	1649	42.6	1
Billings	Acclaimed	Acclaimed	1
Bonnechere Valley	4309	50.3	1
Brock	10604	38.6	1
Brooke Alvinston	2164	53.1	1
Brudenell Lyndoch and Raglan	2353	47.8	1
Callander	3690	45	1
Chatsworth	6058	37.1	1
Chisholm	Acclaimed	Acclaimed	1

Cockburn Island	200	65	1
Dawn-Euphemia	Acclaimed	Acclaimed	1
Erin	Acclaimed	Acclaimed	1
Faraday	2640	25.4	1
Guelph/Eramosa	Acclaimed	Acclaimed	1
Horton	Acclaimed	Acclaimed	1
Ingersoll	10462	41.7	1
Jocelyn	831	59.3	1
Joly	Acclaimed	Acclaimed	1
Kearney	2600	41.7	1
Killaloe Hagarty & Richards	3184	59.5	1
Machar	1809	49.8	1
Madawaska Valley	5878	52.1	1
Markstay Warren	Acclaimed	Acclaimed	1
McMurrich	1835	35.3	1
Minto	Acclaimed	Acclaimed	1

North Algona Wilberforce	3612	43.7	1
Oil Springs	Acclaimed	Acclaimed	1
Pelee	555	58.4	1
Perry	Acclaimed	Acclaimed	1
Perth South	Acclaimed	Acclaimed	1
Ryerson	1319	36.5	1
Sioux Narrows Nestor Falls	Acclaimed	Acclaimed	1
South Algonquin	2083	46.1	1
Southwold	4108	37.3	1
St. Charles	1772	51	1
Strong	2038	45.2	1
Sundridge	957	47.8	1
Tehkummah	698	52.1	1
Temagami	Acclaimed	Acclaimed	1
Uxbridge	Acclaimed	Acclaimed	1
Wainfleet	6254	41.6	1

Wellington North			
	8692	36.2	1

 (Table 1.. Municipalities in Ontario which offer vote by mail as a voting method. Includes eligible population and overall voter turnout. Data obtained from Association of Municipalities Ontario. Municipalities with one voting method use VbM exclusively).

The data was created using the Association of Municipalities database which included every municipality in the 2022 municipal election. Municipalities with conflicting data were then cross-referenced from official municipal reports to obtain the most relevant data.

The average turnout rate for the 77 municipalities (excluding acclaimed as only one candidate ran for office) was 40.8%. This is about 5.4% higher than Hamilton's turnout rate of 35.4%. This means that when comparing overall turnout in cities with VBM as an option, Hamilton is on the lower end of overall turnout.

.   Level 1

In level 1 of the analysis, figure 1's municipalities will be reevaluated in which municipalities which are acclaimed (only one candidate for the position) or have a singular voting method of VBM will be removed from the next analysis. This will be done as the purpose of this analysis is to study the choice of vote by mail over other traditional voting methods. Municipalities which offer only vote by mail will have 100% choice of VBM as there is no other alternative choices. The reason for removing acclaimed municipalities is due to the absence of competition in the voting process. After the level 1 process, only 21 municipalities remain.

Data was obtained from each municipality's individual reports. This was done in multiple ways such as official election documents. Other ways included raw data from poll-by-poll vote counts in which VBM numbers were summed to obtain the overall count. Emails to the

respective municipalities were required in cases where VBM numbers were not available without

further inquiry. In rare cases municipalities did not have VBM numbers, rather only in person

vote counts in which the requirement was to total the in person votes and remove them from the

total voter turnout to have VBM remain.

Municipality	Voters during municipal elections	VBM in Municipal Election	Percentage of Vote By Mail municipal (%)	Used VBM in 2018 election?
Sault Ste. Marie	21875	512	2.34	No
Hamilton	143375	2451	1.71	No
Guelph	29254	518	1.77	No
Toronto	563124	19926	3.54	No
Ottawa	316260	8685	2.75	No
St. Catherines	26427	274	1.04	No
Waterloo	22435	512	2.28	No
Elliot Lake	3688	Data Not Available	Data Not Available	No
Kingsville	8510	Data Not Available	Data Not Available	Yes
Meaford	3896	Data Not Available	Data Not Available	No
Pelham	5179	445	8.59	No

Whitby	23872	268	1.12	Yes
Niagara Falls	18773	359	1.91	No
Magnetewan	1169	596	50.98	Yes
Oshawa	22456	161	0.72	No
London	71678	2139	2.98	Yes
Milton	23298	324	1.39	No
Oro Medonte	7218	189	2.62	No
Port Colborne	5008	37	0.74	No
Central Manitoulin	1348	Data Not Available	Data Not Available	Yes
Spanish	340	58	17.06	No

(Table 2. Remaining Municipalities which offered more than one form of Voting in the 2022 municipal elections.)

Hamilton's vote by mail choice percentage is 1.71%, which falls within the lower 3

municipalities in this analysis. The voters in Hamilton chose other voting methods opposed to

the vote by mail at a higher rate than seen in other municipalities.

    b.   Level 2

COMPARING VOTE-BY-MAIL TURNOUT ACROSS ONTARIO   24

In level 2 of the analysis, the list of municipalities will be further specified using the metric of previous usage of vote by mail in the 2018 election. It seems that voting by mail is relatively new in terms of usage as it was not commonly found for the 21 municipalities to have used it in their 2018 elections. To further narrow the scope to municipalities closely related to Hamilton, municipalities which are new to Vote by Mail in the 2022 election are considered related to Hamilton as they likewise are under the idea of "trying it out" for the first time. It will give municipalities who have used it in the previous election an advantage as they have had experience/ the facilities already created to aid in the vote-by-mail process.

The data for the usage of VBM in the 2018 municipal elections was obtained from the AMO Open data. It was then cross-referenced with available open data from each municipality as well as any reports from the 2018 election.

Municipality	Federal and Municipal Wards Overlap?
Sault Ste. Marie	No
Hamilton	Yes
Guelph	Yes
Toronto	Yes
Ottawa	No
St. Catherines	No

Waterloo	No
Elliot Lake	No
Meaford	No
Pelham	No
Niagara Falls	No
Oshawa	No
Milton	No
Oro Medonte	No
Port Colborne	No
Spanish	No

(Table 3. Remaining municipalities which did not use VBM in the previous 2018 election)

c. Level 3

In the final level of analysis, municipalities that have wards that match up on the federal and municipal levels will remain. This will then be used to compare the federal vote-by-mail turnout with the municipal levels vote by mail. If the results show that the municipal and federal percentages are close, it can be seen to be the voter's preference. On the contrary, if there is a gap between the federal and municipal VBM, it can be seen to be a more internalized issue.

Likewise, if a municipality were to underperform in both municipal and federal elections, an

issue may be possible.

The data was obtained by mapping the ward boundaries during each city's 2022

municipal elections and overlaying it above the set federal wards for the 2021 federal election to

view if both the municipal wards cover the same area/population as the federal wards. The

reasoning behind using 2022 municipal data and 2021 federal data is due to the timing in which

each level held an election. The data comparison is under the assumption that Covid 19 did not

play a large role in the decision as the COVID-19 infection rates were relatively similar during

both election times despite being a year apart. Each ward of the federal election contains VbM,

in which they were summed together to make up the same spatial coverage as the municipal

election for the same area.

Municipality	Federal Election District Turnout Percentage	Percentage of vote by mail federal	Municipal Election Turnout Percentage	Percentage of Vote By Mail municipal
Hamilton	49.0	4.9	35.4	1.7
Guelph	65.0	5.9	30.0	1.8
Toronto	57.9	6.7	29.7	3.5

(Table 4. Municipalities with matching municipal and federal Wards along with federal and
municipal election VBM)

The final three cities to remain are Hamilton, Guelph and Toronto. There is a significant

gap between federal and municipal VBM for all 3 cities, yet, in all cases Hamilton falls behind.

This could be for many reasons, yet one apparent reason may be due to the interest of voting by

mail being nonexistent in Hamilton.

II. Data Assessment of Multiple Voting Options and its Effect on Vote by Mail

Vote by Mail is one of many modes of delivery for elections in which it is not always the

sole option for citizens to vote. Does having more voting options decrease the number of citizens

who choose to vote using VbM? 55 Municipalities will be used in this analysis as acclaimed

municipalities will not be included due to their less competitive nature. The analysis will observe

if voter turnout increases while VbM usage decreases as a result of increasing methods of voting.

VbM is...	Mean overall turnout (%)*	Mean VbM participation (as % of all votes cast)*	N*
1 of 5+ voting options	33	2.2	8
1 of 3-4 voting options	33.7	15.65	6
1 of 2 voting options	32.6	4.2	7
Only Option	45.5	100%	34

(Table 5. Ontario municipalities and its mean turnout grouped by the number of voting options
available during the 2022 Municipal elections. Acclaimed municipalities not included)

When grouping municipalities by the number of ways to vote during their elections, it can be seen that overall voter turnout stays relatively the same. It can also be seen initially that with fewer ways to vote, Vote-by-mail usage seems to increase. There may be reasoning to why this is as both Magnetawan (3 ways to vote) and Spanish (2 ways to vote) each have high values for VbM usage that may skew the data. This analysis provides the idea that having multiple ways to vote does not affect the number of people who choose to use Vote by Mail over other options.

III. Data Assessment in Relation to the Administration of VbM Across Municipalities

a. Hypothesis: The administration of vote-by-mail systems impacts the overall vote-by-mail (VbM) turnout across cities

The administration of VbM systems varies across the 77 municipalities within Ontario which offer VbM for municipal elections. The most common method of administering VbM, which is also followed by Hamilton, is by eligible voters completing a registration form a month prior to the election through either the Internet or by phone (City of Hamilton, 2022). Once the form is completed, voters are then sent a VbM package which includes a ballot, a voting instruction sheet, an inner secrecy envelope, a voter declaration form and a return envelope which is prepaid (City of Hamilton, 2022). Once voters have filled out the ballot as per the instructions provided, they can then mail their ballot through Canada Post or drop it off at assigned locations within the municipality (City of Hamilton, 2022). Additionally, all Ontario municipal elections took place on October 24, 2022, and VBM kit registration started a month prior on September 1, 2022 (City of Hamilton, n.d.). Hamilton's VBM registration was available from September 1 to September 22 (City of Hamilton, n.d.). For VBM ballots to count, voters

had to ensure ballots were received by election day. Similarly, the City of Toronto and Guelph had VBM registration available starting September 1 and ending on September 23 with ballots having to be received by election day (City of Toronto, n.d.).

Although many municipalities follow this procedure for administering VbM, they do vary slightly in the process. For example, Toronto which has a VbM turnout of 3.54% municipally allows voters to request a braille VbM package (City of Toronto, 2023). This 1.8% higher VbM municipal turnout in Toronto than in Hamilton could be due to fewer accessible VbM options provided by Hamilton. Sault Ste. Marie has a higher municipal VbM turnout than Hamilton by 0.62%; Sault Ste. Marie differs from both Toronto and Hamilton as it allows voters to order voter registration kits for pick up rather than only being mailed to their address (Sault Ste. Marie, 2022).

A Hamilton-specific administration problem which occurred in the 2022 municipal elections that could explain Hamilton's low vote-by-mail turnout is due to delays in receiving the ballots. VbM packages had to be submitted by October 13, 2022, in order to be considered for the 2022 municipal election. However, residents reported to the CBC that they did not receive their ballots in time to meet the deadline (Nickerson, 2022). Voters who fell into this category did have the option to drop them off in person but ultimately defeats the purpose of requesting mail-in ballots for most citizens (Nickerson, 2022).

Additionally, other irregularities in the VBM process may develop, particularly where municipalities have little capacity to arrange VbM amid several alternative voting modalities, or when VbM is being used for the first time. One of these irregularities took place in Hamilton where instructions provided in the mail-in ballots were unclear and confusing due to the fact that they were the same set of instructions used for in-person voting (Nickerson, 2022). The

instructions relayed that all markings on the ballot should be made in the pen provided, however, the kits did not include a pen (Nickerson, 2022).

Furthermore, Hamilton had a VBM privacy breach that affected 450 voters registered for VBM (Brown et al., 2023). On October 13, 2022, email addresses were mistakenly entered in the "to;" line instead of the "bcc:" line leading to the exposure of email addresses to all recipients of the email. The breach only revealed email addresses, with no other personal information exposed (Brown et al., 2023). Despite efforts to recall the message, the recall was unsuccessful for external addresses outside of the "Hamilton.ca" domain (Brown et al., 2023). The Office of the City Clerk received ten comments regarding this breach (Brown et al., 2023).

This privacy breach combined with the aforementioned delay in Hamilton residents receiving their VBM ballot and the confusion surrounding VBM instructions, likely led to voter's trust in the VBM process being eroded. These incidents may have created doubts about the reliability and security of VBM, leading voters to be less inclined to utilize this method in not only the 2022 municipal elections but also future elections.

b. Hypothesis: Cities with notably high VBM (Vote-By-Mail) turnout rates can be attributed to low population density and low alternative voting methods available

Other municipalities or townships with Ontario that have significantly higher VbM turnouts such as the township of Magnetawan which had a municipal VbM turnout of 50.98% and the Town of Spanish which had a municipal VbM turnout of 17.06% have fewer available voting methods when compared to the City of Hamilton. Magnetawan only administers three methods of voting while Spanish administered only two. In contrast, Hamilton has six available voting methods which can possibly explain the lower VbM turnout rate. As shown in the data

set, there are only 5 cities including Hamilton, Guelph and Toronto which offer 6 methods of

voting. The outlier is Sault Ste. Marie which offers 9 voting methods for municipal elections.

Out of these 6 municipalities, Toronto has the highest VbM turnout of 3.54% followed by Sault

Ste. Marie with 2.34%, Ottawa with 2.75%, Guelph with 1.77% and lastly with Hamilton which

has the lowest VbM turnout at 1.71%. It is possible that the amount of voting methods available

plays a role in the VbM turnout with the more voting methods available potentially leading to

lower use of VbM and an increased use of other methods.

Additionally, municipalities that have substantially higher VbM in Ontario such as the

town of Spanish can be explained by the geographical location as well as the population density

of the town (Town of Spanish, nd). The town of Spanish only had 340 voters during the 2022

municipal elections. Additionally, according to the 2021 census, the Town of Spanish has a

population density of 6.3/km^2 (Statistics Canada, 2023). In contrast, Hamilton has a population

density of 571.8/km² (Statistics Canada, 2023). This significant disparity in population density

suggests that people in rural Spanish are more spread out, leading to a higher likelihood of

utilizing VbM due to possible barriers to in-person voting such as a large distance to polling

locations.

IV. Data Assessment Comparing Federal and Municipal VbM

 .   Hypothesis: Federal VbM turnout is higher than Municipal VbM turnout due to the

allocation of capacity and resources

Hamilton's federal VbM turnout is 4.87% which is 3.16 percentage points higher than its

municipal VbM turnout. Additionally, Toronto and Guelph also have at least double the amount

of federal VbM turnout than municipalities. One of the main factors that could explain this

significant gap is the capacity and resources available to the federal election body.

Hamilton, Guelph and Toronto all only started offering VbM for municipal elections in

2022. In contrast, the federal elections have offered VbM as an alternative voting method since

1993 (Canadian Museum of History, n.d.). This 29-year head start can play a significant role in

the disparity between federal and municipal elections as it gives federal voters a long-established

familiarity and trust in the vote-by-mail system. Over nearly three decades, federal election

authorities have had ample time to refine and promote the VbM process, thereby increasing

awareness and accessibility among voters. In contrast, the recent adoption of VbM for municipal

elections in Hamilton, Guelph, and Toronto may result in lower turnout initially, as citizens may

be less accustomed to this voting method or less aware of its availability compared to federal

elections.

To participate in VbM federally, Elections Canada offers individuals the opportunity to

sign up through either their online website, through the phone or by going in person to an

elections office (Elections Canada, n.d.). The ballot can only be sent through the mail, unlike

Hamilton which has an option to drop it off.

Furthermore, the federal election budget is much higher than the municipal budget.

Hamilton's 2022 municipal election budget was $2.8M however, the city spent closer to $2.7M.

In contrast, the federal budget is $22 per registered voter which comes out to $5.8M for

Hamilton. That is a $3M difference and can account for the discrepancy in VbM voter turnout as

Elections Canada has a greater budget to carry out election activities such as advertisements,

voter education campaigns, and logistical operations. With a significantly larger budget per

registered voter, Elections Canada has more resources at its disposal to promote various voting

methods, including vote-by-mail (VbM), and to ensure that voters are aware of their options and know how to participate in the electoral process.

Recommendations to Improve VBM Turnout in Hamilton

The research presented in this paper has highlighted some gaps within Hamilton's VBM process which likely contribute to the low VBM turnout rate in the 2022 municipal elections. These findings underscore the importance of addressing these deficiencies to ensure that VBM turnout rates increase in the upcoming 2026 municipal elections. In response to the identified gaps, this paper proposes a series of recommendations aimed at fortifying Hamilton's VBM system and fostering greater engagement.

First and foremost, Hamilton must rectify the VBM issues that occurred during the 2022 municipal election. Issues such as late VBM ballot delivery, confusion surrounding ballot instructions and the voter privacy breach eroded confidence in the VBM process. To rebuild confidence and trust, Hamilton should take immediate action to address these issues.

Regarding the VBM ballot delay, Hamilton should consider extending it's VBM registration period which is currently a 23-day period to at least 40 days. This could help mitigate the risk of late ballot delivery by allowing more time for the processing and distribution of ballots. Additionally, extending the registration period would reduce the likelihood of last-minute registrations overwhelming the system and causing delays. Moreover, a larger VBM registration period would allow extra time for Hamilton to promote VBM as an alternative method and for citizens to navigate the VBM registration process. If voters are experiencing

issues with voting by mail, Hamilton will also have more time to address the issues and ensure that voters can cast their ballots before the deadline.

Alternatively, instead of extending the VBM registration period, Hamilton could consider the possibility of sending a VBM ballot to all citizens. As previously mentioned, an American study conducted by the Vote at Home Organization found that in states where VBM kits were sent to all registered voters, VBM turnout increased by up to 8% (Vote at Home Organization, 2023). Additionally, voter turnout as a whole increased by 4% (Vote at Home Organization, 2023). This study recognizes that this may not be possible due to budgetary and personnel restrictions, however, it is an effective VBM administration method to consider.

Moving on to the ballot confusion that occurred in 2022 due to the use of in-person ballots in VBM kits, Hamilton should revise its VBM kit to ensure that all material is easy to comprehend. Hamilton should also make a separate ballot used just for VBM. This separate VBM ballot should be clearly labelled and tailored specifically for mail-in voting, with instructions that are easy to understand and follow. Additionally, Hamilton should conduct thorough testing and review of the revised VBM kit to ensure its effectiveness in guiding voters through the ballot completion process.

Regarding the breach of privacy, Hamilton should follow the auditor general's recommendation of implementing email marketing software (Brown et al., 2023) This implementation will ensure that mass communications have data encryption and additional safeguards to protect the privacy of voters. Moreover, email marketing software also has tools that are useful for tracking analytics such as engagement with communication regarding VBM. This could be useful in determining whether an email is successful in conveying its message to voters and can help tailor future communication to ensure its efficacy.

The final recommendation is for the City of Hamilton to actively engage in VBM campaigns. VBM campaigns can include a variety of outreach activities aimed at educating voters about the VBM process along with the benefits. Since 2022 was the first year Hamilton introduced VBM, it is feasible to hypothesize that not many citizens were aware of the alternative voting method. To address this knowledge gap, Hamilton can engage with local leaders and community organizations in addition to engaging with all forms of media including print and social media. Hamilton can also carry out campaigns such as partnering up with Canada Post and providing free postal stamps to voters who sign up for VBM as a little incentive.

All these recommendations are aimed at making VBM more accessible to voters and building trust for the VBM process between the city and voters. The recommendations collectively seek to address the challenges faced by the City of Hamilton in implementing the vote-by-mail (VBM) system and to enhance voter participation in future elections.

Conclusion

For the first time in 2022, Hamilton became one of the 77 municipalities in Ontario to adopt Vote-by-Mail (VbM) as an alternative voting method for municipal elections. This move to employ VbM was a result of Hamilton wanting to ensure voters were free from all barriers which may prevent them from voting in person such as transportation issues, mobility issues and the weather.

However, Hamilton's launch of VbM was not well received with only 1.7% of citizens

opting to use the voting method (City of Hamilton, 2023). In order to analyze why citizens were

not as keen to use VbM, this study sought to compare Hamilton's VbM system to that of Guelph

and Toronto. These three Ontario cities were selected because they all reside in Ontario, they all

have six voting methods available, and they all share the same municipal and federal boundaries.

Additionally, all three municipalities have higher federal VbM turnout than municipal.

The analysis found that there were two main factors which can be used to explain the

VbM disparity between the three cities: the administration of VbM and the allocation of

resources. The study also found that although Toronto has the highest municipal VbM

percentage at 3.54%, there are very slight factors in the administration of VbM ballots that can

be used to explain the difference. Hamilton, Toronto and Guelph all require voters to register for

VbM kits online or by phone, they all deploy VbM kits that include a ballot, a voting instruction

sheet, an inner secrecy envelope, a voter declaration form and a return envelope. However,

Toronto does allow the VbM package to be requested in braille which may be a small factor in

the higher VbM percentage.

The main administrative differences between the three cities which can explain

Hamilton's low VbM turnout rate have been due to issues that have arisen within the deployment

of VbM by Hamilton. Hamilton-specific problems occurred in 2022, where voters received their

VbM kit late and therefore had to go in person to submit the kit which arguably defeated the

purpose of the alternative voting method. Additionally, instructions provided in the VbM kit

were said to be confusing as it was the same set of ballots and instructions used for in-person

polling. As well as a data privacy breach occurring over email where VbM voters' email

addresses were exposed to one another. These strains within the VbM process in Hamilton can

possibly explain the low turnout rate.

Moreover, the research identified a link between the number of voting methods available

and the percentage of VbM voters. There is a potential negative correlation present with more

voting methods available leading to less VbM turnout as voters are likely to choose other

methods of voting. Furthermore, the research identified a potential link between population

density and VbM turnout with lower population density resulting in higher VbM turnouts

municipally.

The research also showed that all three Municipalities having higher federal VbM rates

can be explained by the increased allocation of capital available in federal elections. The budget

for the federal election is $22/registered voter, this comes out to $5.8M for Hamilton.

Comparatively, the municipal election budget for 2022 was only $2.8M. This $3M difference

can make a significant impact on the outreach and resources available for promoting and

facilitating VbM participation, explaining the higher federal VbM rate. Furthermore, federal

VbM has been available since 1993 compared to Hamilton only introduced VbM in 2022,

leading to a longer period of familiarity and trust among voters in the federal VbM system.

Finally, recommendations to address the low VbM turnout due to administration

differences and errors were made. The recommendations included extending the VbM

registration period in Hamilton to ensure that there are no delays. Alternatively, to prevent delays

Hamilton can also implement a universal VbM kit method where all registered voters are mailed

a kit. Moreover, the city of Hamilton should consider investing in email marketing software to

ensure data security for voters along with investing in VbM campaigns to raise awareness and

educate voters about the benefits and process of VbM.

Although this study was conducted with thoroughness, it is important to acknowledge its

limitations. One of the main limitations of this study was the availability of data. Since the

dataset was constructed using data available on federal and municipal websites, there were some

instances where we were unable to obtain the data. This absence of data could potentially

introduce bias or incomplete analysis, limiting the depth of our findings. Furthermore, this study

compares VbM utilization across the recent 2022 municipal elections. It does not take into

account the long-term trends or historical context of VbM adoption in these municipalities.

Finally, the study is unable to definitively determine causative relationships. Although there is a

correlation between various factors such as the availability of braille in Toronto and VbM

turnout rates, establishing causality is challenging due to other unmeasured variables that could

potentially influence VbM rates.

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Appendix

CRAAP Test: The CRAAP test is a multistep evaluation in which the currency (age of information), relevance (how does it pertain to the topic), authority (source of information), accuracy (the correctness of the information) and purpose (why the information is needed) is evaluated to determine the effectiveness of a source of information/data.

Complete Dataset :

https://docs.google.com/spreadsheets/d/e/2PACX-1vR_VqTzGhqr_TDqdk8Bmp7Zhd4ovVM3ZtZBySmQnxSBX4bm5zGNgBHbdr9LqiZMYq8eiy71mcniyG3A/pubhtml