

MUNICIPAL CAPACITY: A CASE STUDY OF ONTARIO'S GREENBELT TO RESPOND TO EMERGING AGRICULTURE AND AGRI-FOOD PRIORITIES

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ABSTRACT

A large portion of the most agriculturally-viable land in Canada is in the province of Ontario, particularly within the Greenbelt. Within Ontario, municipal governments are the primary mechanism by which provincial land-use policy is implemented, and virtually all agricultural production happens within the boundaries of an upper-tier municipal government. This means that municipal governments (local and regional governments) are the most local level of government responsible for making decisions and implementing programs and policies related to the agriculture and agri-food sector. However, little is known about the structure, knowledge base, and capacity of municipal governments to respond to agricultural and agri-food priorities and issues. This paper presents the results of research identifying a number of positive and negative factors that contribute to municipal capacity. This capacity is varied and relates directly to the ability to address emerging agricultural priorities. Governments and decision-makers who affect the agriculture and agri-food industry must have the capacity and knowledge to support the sector and respond to critical issues as they arise. The decisions of elected officials, the resources that municipalities have, and the expertise of staff are all key elements that affect the implementation of provincial priorities and the consideration given to agriculture when creating policies, programs, and initiatives.

Keywords: agricultural planning, county/regional planning, food systems, municipal capacity, rural community development, Ontario.

1 INTRODUCTION

In Ontario, the agriculture and agri-food industries contribute to \$39.5 billion in GDP annually, supporting over 822,000 jobs and approximately 11.5% of the Provincial labour force [1]. As home to more than half of Canada's most agriculturally-productive land [2], the Province plays a critical role in supporting Canada as the world's ninth-largest agricultural exporter, and in turn, feeding both Canadian and global communities [3]. The success of Ontario's agricultural and agri-food industries, however, is dependent on the knowledge, capacity, and willingness of local governments to make informed decisions in supporting the industry and responding to emerging priorities as they arise.

As both municipal governments and the agricultural industry are ever-evolving, the relationship between the two is critical: several provincial priorities, such as agricultural land preservation, agricultural and natural heritage systems planning, cannabis production, and climate change mitigation and adaptation, require the support of effective and successful policy implementation to promote a thriving agricultural economy in Ontario. All rely on municipal involvement with appropriate plans and policies in place to support these priorities. The extent to which municipalities are able and willing to respond and contribute, however, has yet to be empirically explored in the context of one of Canada's and Ontario's most agriculturally-productive regions – the Greenbelt. Local governments must ensure they have the capacity (e.g. staff, expertise, or local public trust) to respond to emerging agricultural issues and capitalize on new opportunities to enhance the agricultural system. It is equally

important that municipal elected officials understand the needs of agriculture, demonstrating a willingness to support this essential sector, and make timely, relevant decisions which support the agricultural and rural economy.

This project aims to address the question which is foundational to successfully responding to agricultural priorities and challenges at the local level: what is the capacity and willingness of municipalities across the Greenbelt to respond to emerging agricultural priorities?

2 LITERATURE REVIEW – CONNECTING ACADEMIA TO PRACTICE

Canada's Constitution Act delineates agriculture as both a federal and provincial responsibility. Within Ontario, the Planning Act, Provincial Policy Statement, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Niagara Escarpment Plan, and the Growth Plan for the Greater Golden Horseshoe are primarily implemented through the actions of municipalities, by way of a transfer of decision-making power from Federal and Provincial levels, with varying levels of autonomy [4]. Specific to agriculture, priorities defined by the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) also depend on the activities of municipalities. Municipalities adopt Official Plans, pass by-laws, develop budgets, and expend funds to be consistent with and conform to provincial policies and initiatives on matters specific to agriculture and agricultural planning, such as OMAFRA's Guidelines on Permitted Uses and Agricultural Systems Planning. Municipalities must comprehend, analyse, and implement these Provincial documents to build policies which reflect both Provincial direction and local needs.

In Ontario, there is significant variability in the structure of municipal government [5]. In the majority of rural areas, there is both an upper-tier municipal government (county or region), and a lower-tier municipal government (typically, referred to as a town, township, city, or municipality). Whyte [6] identifies several factors impacting food systems in Ontario, in which municipalities must respond to, including population growth, the loss of farmland, declining soil health, and water quality. These are similar to the challenges discussed in the publication titled Canada's Action Plan for Food Security which identified farmland loss, climate change, globalization, and imported foods as critical threats to Canadian food security and agricultural successes [7]. Both upper- and lower-tier municipalities must be prepared to address these issues effectively and efficiently.

Historically, agriculture and food systems were not explicitly viewed as part of the planning portfolio [8]–[10]. Connell et al. [4] discuss how counterintuitive this seems as agriculture and agri-food industries are dependent on both the spatial availability and physical health of the land. It was not until the 1970s that farmland conservation became a significant discussion and provincial legislation mandating its protection at the municipal level was put in place [11]. Today, the planning portfolio is greatly expanding beyond just land use, and county and regional governments, in particular planning departments, play a critical role in addressing a variety of issues to sustain the economic, social, and environmental viability of agricultural and agri-food industries [4,12].

The effectiveness and success of municipalities to adequately address these issues is dependent on the capacity and knowledge of both elected officials and staff. However, there is little research regarding the structure, knowledge base, and capacity of local governments to respond to agricultural and agri-food priorities and issues.

The ability and willingness of municipalities to respond to agricultural and agri-food priorities effectively depends on their level of capacity to do so, which can be influenced by the values and priorities of elected officials. Without political will, the creation of mandates and

strategic policy direction will not occur. The decisions of elected officials, the resources that municipalities have, and the expertise of staff are all key elements that affect implementation of provincial priorities and the consideration given to agriculture when creating policies, programs, and initiatives. For instance, some municipalities may have staff who are trained in agricultural or rural planning and are thus better equipped with the knowledge, technical expertise, and experience to respond to agricultural issues on the ground. On the other hand, many municipalities do not have planners on staff that have agricultural-specific training or no in-house planning department at all. Similarly, some municipalities may have agricultural advisory committees and allocate resources to facilitate positive relationship building with the agricultural community – and others may not [13].

Varying ranges of capacity at the municipal level may impact whether municipalities proactively or reactively plan for the agricultural sector. For example, some municipalities, such as Middlesex County, have undertaken a proactive approach in planning for agriculture with the development of their Agricultural Strategy [14]. Similar proactive approaches can be seen with Grey County, and the development of their climate change action plan, which actively seeks strategies to help evaluate the role of agriculture in addressing climate change mitigation and adaptation [15]. Likewise, both Huron County and Waterloo Region deliver water quality programs in collaboration with Conservation Authorities, funding thousands of projects together and taking a proactive approach to dealing with water quality issues [16]. Other municipalities have gone beyond the minimum provincially legislated responsibilities to establish a framework for planning which prioritizes and enhances agricultural protection and support. This initiative is exemplified with the Region of Waterloo's Official Plan, whereby additional agricultural policies have been included [17]. Official Plan policy provides opportunities to create and innovate policy frameworks which goes beyond the minimum support for agriculture required by the Province. Examples of this include, provisions for on-farm diversified uses and opportunities for commercial agricultural services, all of which enhance protection, viability, and resilience for agriculture at the local level. The above examples are not mandated by upper levels of government and are the result of staff and elected official knowledge, will, leadership, and capacity. These proactive and forward-looking approaches to planning for the agricultural sector ultimately raise questions about why some municipalities may or may not be embracing agriculture to this extent.

Davidson [18] provides a historical context to uncover some insight into the varied efforts of municipalities. His research focusing on thirteen upper-tier planning departments in Ontario reveals two challenges impacting planning at the upper-tier level. First, the establishment of over-optimistic expectations (namely expanding mandates and responsibilities with limited expanding resources to meet these mandates), and second, inter-municipal jurisdictional challenges (particularly between upper and lower-tier municipalities). Additionally, Davidson identified several other issues impacting upper-tier capacity, including: outdated plans; a lack of focus brought to non-physical planning; the relationship between local needs to provincial legislation; staffing numbers at the upper-tier and lower-tier; municipal restructuring; opportunities to diversify the significance of planning as it matters to rural communities and rural economic development; and the presence or absence of a planning department, as well as their associated budgets.

Many of the trends identified in Davidson's [18] research persist today and point to a sustained relationship between municipal capacity and the ability to deliver on critical planning mandates. Ontario's municipalities and their planning departments possess varying levels of capacity, and as a result, the ability to address current problems and implement related policy

is intermittent and varied. For example, Halton Region has significant municipal resources, yet has struggled at times with responding to agricultural issues related to natural heritage designations [19]. Similarly, Perth County retains some of the most valuable and productive farmland in Canada and yet grapples with matters on surplus farm lot severance policy [20]. Beyond this, planning department structure and staffing across the Province is varied. At the time of writing, initial scans of County Planning Department websites reveal that individual counties, such as Oxford and Huron, have eleven and nine planners respectively [21,22]. In contrast, municipalities such as Dufferin and Elgin, have no more than a single staff member dedicated to planning [23,24]. This example illustrates the wide variation in planning staff capacity across Ontario's – and provides reason to believe that other municipalities' planning departments may be similarly variable. While it could be argued that these disparities exist due to variations in population size and land area, it is essential to remember that planning is responsible for the management of both communities and land [16]. Staffing numbers are fundamental to this means, particularly in terms of addressing priorities for people and the environment at the municipal level.

The evolving relationship between upper-tier and lower-tier municipalities, first discussed by Davidson [18], is of growing interest within the Greenbelt where the rural landscape is contested in a way that is distinct from the rest of Ontario due to its ideal urbanizing geographic location and prime soil quality [25,26]. The Greenbelt is a protected area within the province of Ontario, comprised of over 800,000 hectares of land including farmland, forests, settlements areas, and wetlands [40]. The Greenbelt was created in 2005 following the passage of the Greenbelt Act [40]. The Greenbelt Plan provides guidance for the long-term protection and sustainability of significant land based resources (including agricultural) within this region. A report by Caldwell and Proctor [27] titled Possibility Grows Here, identifies some of the challenges agricultural producers in the Greenbelt are facing, which includes working with planning departments and adapting to planning regulations. Similar to Davidson [18],

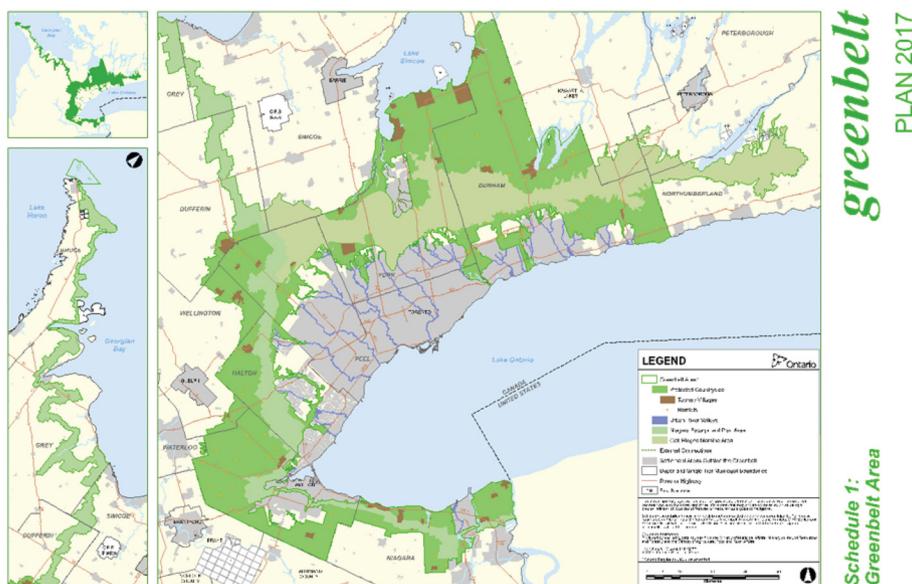


Figure 1: Map delineating the Greenbelt area [42].

Caldwell and Proctor [27] also note the diverse and varying capacities of upper-tier planning departments, some of whom dedicated resources to build staffing capacity to respond to agricultural issues. Where this type of capacity was present, notable differences in responsiveness of planning departments to the needs of agriculture were evident.

Municipalities located within the Greenbelt tend to have larger urbanizing populations relative to municipalities elsewhere in the Province. In turn, these municipalities operate within a more contested landscape. The Greenbelt Plan has, however, been very effective in curbing urban expansion within the area known as the Protected Countryside. In fact, research completed by Drake, Epp and Caldwell demonstrates that there have been no conversions from agriculture to urban uses within this designated area following the adoption of the plan in 2005 [41]. That being said, research on Agricultural Advisory Committees in the Golden Horseshoe and Greenbelt area indicates a need to innovate planning practices and institutions in areas where agriculture is increasingly competing with the surrounding urbanizing communities [13].

These localized observations are reflective of research conducted on municipal capacity elsewhere and offer insight as to why some municipalities effectively plan for agriculture while others may not. In the American context, Daniels [28], Daniels and Payne-Riley [29], and Dillemuth [30] reiterate critical links to public support, political will, focus, culture, and resources. All of which impact the capacity of individual planning departments to explore possibilities, take advantage of opportunities, gain public support, and involve local elected officials to respond to local issues meaningfully and effectively. Similarly, Larson et al. [31] identified the link between the local government's capacity and their ability to respond to environmental changes. Their work looked at the capacity of three regions in New York State to respond to environmental challenges and identified factors for capacity, including essential resources (economic and human), social capital and stakeholder collaboration, as well as political legitimacy (inclusive of public trust in the local administration). In the Australian context, Budge and Butt [32] identify the importance of planners in raising issues related to farmland preservation and the development of a partnership between planners and farmers in generating a greater profile. These findings highlight three points of significance regarding the capacity and willingness of municipalities across Ontario's Greenbelt to respond to emerging agricultural priorities:

- 1) Issues are increasingly complex and continuously evolving in rural and agricultural communities.** Municipalities are required to respond to critical issues such as climate change, and shifting socioeconomic and demographic trends, yet may lack the capacity to do so effectively. This includes ensuring a productive land base for current and future agricultural production is available, and establishing and implementing policies which positively balances growth and development in a way that is supportive of the agricultural sector.
- 2) Municipalities are the mechanism by which provincial policy and priorities are implemented on the ground.** Municipal planning must account for the nuanced differences which exist between community contexts. Issues connected to severance policy, aggregate operations, and greenhouse or cannabis production are examples of topics that are important provincially but will be primarily implemented through municipal action. The decisions of elected officials, the resources that municipalities have, and the expertise of staff are all vital contributors to successful policy and strategies that respect and acknowledge the critical role of agriculture.

- 3) Upper-tier and lower-tier municipalities have differing capacities and abilities to act.** This trend was noted initially in Davidson's [18] work and experience suggests that this is equally (if not even more) important of an issue today. Over time the expectations and responsibilities of municipalities in Ontario have grown, and the needs of agriculture have evolved with additional and more interrelated challenges, priorities, and opportunities. There is no baseline knowledge regarding how well-prepared municipalities have become (or yet to) in dealing with agricultural issues, nor is there documented knowledge regarding how well municipal governments may apply an agricultural lens to their planning endeavours.

There is limited prior research that explores the challenges rural municipalities face in dealing with complex and multifaceted rural and agricultural issues, such as risks associated with climate change. Prior research, such as from Davidson [18], only focused on thirteen counties and from a different time (conducted over 30 years ago). Past research also does not focus on the ever-evolving issues impacting agriculture today (e.g., cannabis production was not a planning issue thirty years ago). As such, a current and comprehensive assessment of municipal capacity to respond to agricultural issues facing Ontario's most agriculturally-productive region is needed and would be of value to stakeholders involved in agricultural planning all across the Commonwealth [10].

3 METHODS

Capacity can have many definitions in a variety of contexts. Within the scope of this study, capacity within the municipal setting is described as the ability to use internal and external resources, available either formally or informally, at both government and greater community levels, to respond to emerging agricultural and agri-food issues effectively.

3.1 Study area and sample

The study area includes both upper-tier (including counties and regions) as well as lower-tier municipalities within the Greenbelt. Upper-tier municipalities can be understood as the managers of a large geographic area; they ensure consistency, implement federal and provincial policy, and coordinate regional influence. They are responsible for implementing land-use policies, coordinating environmental stewardship efforts, and strengthening local food systems. For the sake of this study, single-tier municipalities have been included in our discussion along with upper-tier municipalities. On the other hand, lower-tier governments are located within the boundaries of an upper-tier and deliver the services not provided by the upper-tier counterpart. They often represent or advocate for the more contextualized interests of the community to the upper-tier municipality. Specifically, municipalities included in the study area were all municipalities that had a large agricultural presence or are predominantly located within the Greenbelt, including the Oak Ridges Moraine and the Niagara Escarpment. Some municipalities within the Greenbelt were excluded from this study either due to being heavily urbanized (e.g. Mississauga, Toronto) or having a small proportion of their land base located within the Greenbelt, relative to the rest of their land base (e.g. New Tecumseth). All upper-tier municipalities within the Greenbelt were included in the study area, including Dufferin, Grey, Peterborough, Simcoe, Wellington, Bruce and Northumberland Counties, as well as Niagara, York, Durham, Halton, and Peel Regions. While all upper-tiers were included, this study did not include all planning departments at the lower-tier level for the reasons stated above. Representation of these lower-tiers is captured by way of retaining their

upper-tier counterpart who is often the jurisdictional authority for making planning-related decisions. While not including all lower-tiers is arguably a limitation of this study, this study remains as a further contribution to the state of knowledge on municipal capacity, as the most recent assessment on this topic is exclusive to thirteen upper-tier planning departments in Ontario (see Davidson [18]).

3.2 Methodology/research design and methods

This study utilizes a mixed-method explanatory sequential design to assess the current state of municipal capacity to respond to emerging agricultural and agri-food issues in the Greenbelt [33]. This design consists of two distinct phases: a quantitative phase, consisting of survey data collection and secondary data analysis to paint a picture of the current state of municipal capacity in using quantitative indicators, followed by a qualitative phase, where semi-structured interviews were conducted to provide a greater depth of elaboration and explanation to the data collected in the first quantitative phase.

This study focuses on two main sample groups in exploring the capacity of counties, regions, and lower-tier municipalities in the Greenbelt to respond to evolving agricultural issues and their willingness to support and build a vibrant agricultural sector: elected officials and planning departments, both at the municipal level. Contacts for each municipality were identified through the Ontario Municipal Directory.

Surveys were sent out to both elected officials and senior planners at each municipality to inquire into the resources, attitudes, and perspectives of capacity in responding to local agriculture and agri-food priorities amongst municipalities in the Greenbelt. The final response rate for surveys amongst the elected officials sample was 77.27% (87 responses, representing 51 municipalities) and 72.72% (48 responses) for the municipal planning department sample.

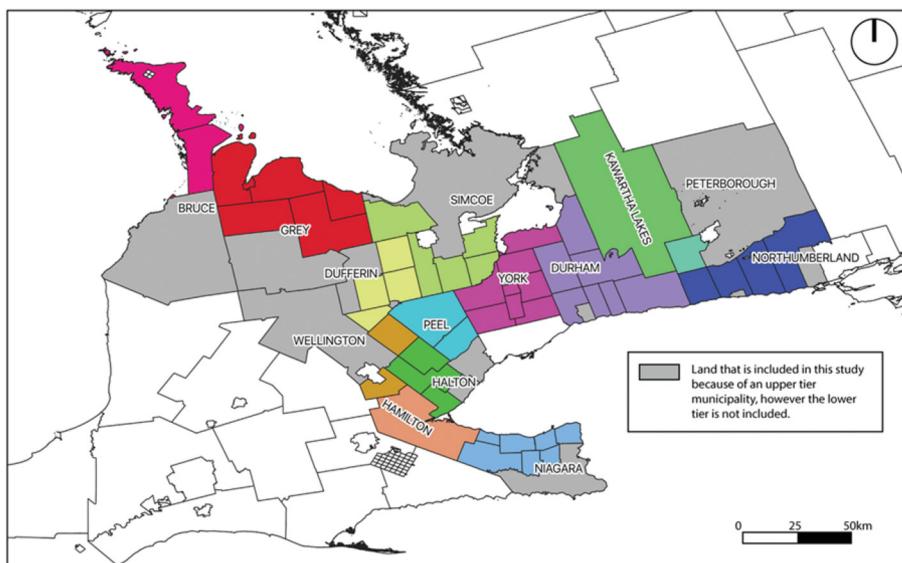


Figure 2: Map depicting municipalities in the Greenbelt region which were included in the study [43].

Where we received a non-response from municipalities in completing the survey, the research team used the most recent Financial Information Return (FIR) data, available publicly online from the Ministry of Municipal Affairs and Housing (MMAH), to fill in gaps of missing information [34]. While the FIR data was not comprehensive in providing all missing information, as it was sometimes incomplete, it was useful in determining quantifiable indicators of capacity amongst municipal planning departments (e.g. budgeting and staffing resources). FIR data was also used to triangulate and verify the data collected on quantifiable indicators of capacity, in comparison to what was self-reported in the surveys. Survey data was analysed using descriptive statistics in SPSS Statistical Software.

Interviews provide a more detailed and contextualized account of the survey responses provided by the municipality's elected officials and planning department, particularly in understanding policies and the underlying values of organizations [35]. These interviews were conducted with the planning directors/commissioners, or in a few cases, a senior planner on staff, only with those municipalities whose planning department completed the survey. The interview guide was informed by a scan of grey literature and input from the research advisory committee, to identify current issues, opportunities, and expectations of municipalities in responding to agricultural priorities at the local level.

A total of 41 interviews with planners, each representing a different municipality, were conducted, leading to a response rate of 62.12%. Every municipality who completed the survey and identified a contact at the department to interview, or responded to the research team directly via email, was interviewed. While several efforts to retain participants who filled out the survey were made, some municipalities who participated in the first quantitative phase of the study opted not to participate in the interview phase due to a variety of reasons related to staff capacity or a lack of time. Additional municipalities identified that they could not complete either the planner survey or interview. In total, planners from five municipalities provided written comment, via email correspondence, that capacity issues, such as a lack of time, were preventing them from participating in either phase of the research process. All interviews were hosted via phone or video call and lasted an average of forty-five minutes in length. Interviews were recorded using an external recording device and then transcribed using Otter.ai transcription software. Coding and thematic analysis of the data were done using NVivo Qualitative Data Analysis Software.

4 FINDINGS AND DISCUSSION

4.1 Issues in agriculture

In the surveys, participants were asked to record (site-specific or municipality-wide) issues related to agriculture most frequently dealt with in their municipality. In their respective surveys, planners and elected officials were also asked to describe the challenges they face in understanding and making decisions related to agriculture. In the semi-structured interviews with planners, an additional question was posed to participants related to issues and challenges in agricultural planning and decision-making. From these three sources of information, a critical context for understanding the importance of municipal capacity in responding to agricultural and agri-food priorities is created.

The challenges occurring in the agricultural areas of the Greenbelt emerge as a result of evolving social, economic, and political changes to predominately agricultural communities across the province. An increasing population and demand for housing, concerns for climate change and environmental stewardship, the introduction of new crop types (notably

cannabis), urban interest in the rural residential idyll, among other socioeconomic shifts, impact the general success of the agri-food sector. Some issues and challenges are more constant and have been on the radar of the agricultural community, planners, and politicians for years, including pressure to develop the land, conflicting land uses, and normal farm practices [36]. There are a host of other issues that fluctuate based on a variety of social, economic and political factors. For example, the introduction of wind turbines into the rural area was an issue the province grappled with in the last decade [37]. As evidenced in participant responses, some of the most frequently noted contemporary issues related to cannabis production, the illegal dumping of fill (i.e. often-polluted topsoil excavated from brownfields), and agricultural diversification.

The issues and challenges shared by participants are essential in understanding the necessity for building capacity in planning departments, on council, and holistically within a municipal corporation. A list of the top ten issues mentioned by participants is included below:

1. Cannabis production
2. Development pressure
3. On-farm diversification
4. Land severance (i.e., land division)
5. Dumping of fill
6. Policy barriers to capacity
7. Farm property taxes
8. Conflicting land uses
9. Environmental stewardship
10. Public understanding of agricultural issues

4.2 Measuring municipal capacity

The following section presents the findings from the quantitative and categorical survey questions.

4.2.1 Planning department staffing

The first indicator of capacity assessed is the number of planning department staff within the municipality. Survey respondents were asked to differentiate between full-time, part-time, support, and other staff in their planning department. Figure 3 shows the range of full-time planners (aggregated into two groups: single- and upper-tier municipalities, and lower-tier municipalities) against population [37]. Figure 4 is similar but instead of population, land area is displayed as the independent variable.

It can be observed that the range of full-time planners in upper- and single-tier municipalities is from 1 to 56 and from 0 to 50 in lower-tier municipalities. Table 1 highlights the five municipalities who have the most and fewest number of full-time planners.

Figure 3 and 4 illustrate that there is generally a positive association between population and the number of full-time planning staff, particularly among lower-tier municipalities. In contrast, there is no association between the land area of a municipality and the number of full-time staff at the lower-tier level, along with a negative association between land area and full-time planning staff for single- and upper-tier municipalities. These findings may suggest that the planning department's staffing is more heavily influenced by population, given that larger urbanizing populations are associated with increased development activity, transportation needs, and increasingly complex policy-development needs. However, these findings

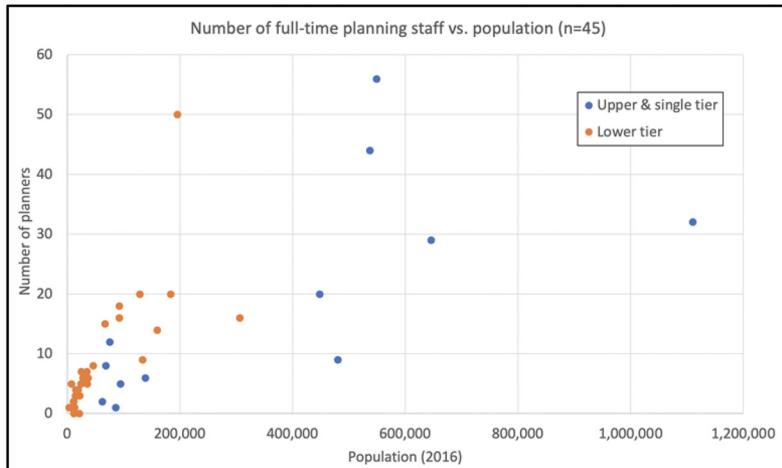


Figure 3: Number of full-time planning staff vs. population [37] (Survey data) [34].

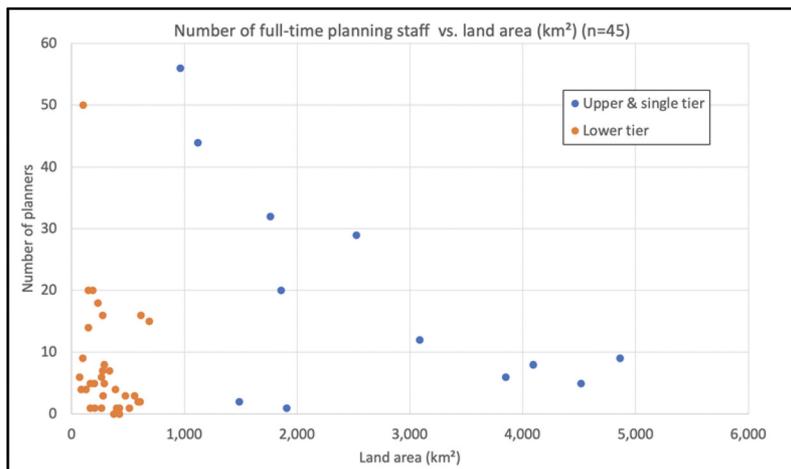


Figure 4: Number of full-time planning staff vs. land area (km²) (Survey data) [34].

Table 1: Municipalities with the fewest and most full-time planners ($n = 45$).

Municipality type	Municipality name	Number of full-time planners	Population [37]	Land area (km²)
Lower-tier	Uxbridge	0	21,176	421
Lower-tier	Adjala-Tosorontio	0	10,975	372
Upper-tier	Northumberland	1	85,598	1,905
Upper-tier	Dufferin	2	61,735	1,486
Upper-tier	Grey	5	93,830	4,514
Upper-tier	Durham	29	645,862	2,524
Upper-tier	York	32	1,109,909	1,762
Single-tier	Hamilton (City)	44	536,917	1,117
Lower-tier	Richmond Hill	50	195,022	101
Upper-tier	Halton	56	548,435	964

also suggest that the planner role is not influenced by land management needs, particularly at the single- and upper-tier level where the number of planners at a municipality decreases as the area of the municipality increases. It is generally regarded that the role of planners is to responsibly manage growth as it pertains to both population and land. It is also believed that planners must take both an inter- and intra-generational approach and this necessitates care and attention for both urban and rural areas and the relationship between the two.

4.2.2 Planning department budget

The second indicator to explore municipal capacity in this research is the value of the planning departments' budget. Again, upper- and single-tier municipalities are shown separately from lower-tier municipalities. Figure 5 depicts the range of financial resources available to lower-, upper- and single-tier municipalities. Nearly half of the lower-tier municipalities have a budget of less than \$500,000 and the majority of upper- and single-tier municipalities have a budget above \$3,000,000. It should be noted that Figure 5 relies on FIR data to fill in missing data. The FIR dataset revealed that variability in budgets is potentially much larger than captured by the survey, ranging from less than \$50,000 to more than \$20,000,000 [34]. While available budgets are influenced by many factors, including population, development, and economic growth, there are certain planning activities, including the implementation of provincial policies, that are required regardless of the available budget. Identifying the minimum required financial resources for planning departments to carry out provincially-mandated planning and land use related activities would help to ensure that adequate resources are available in each municipality and that there is consistency and equitable resources for municipalities to meet these mandates across the province.

4.2.3 Presence or absence of an agricultural advisory committee

Whether or not a municipality has an agricultural advisory committee is another factor when considering capacity related to the agriculture and agri-food sectors. An agricultural advisory committee is a group (of primarily agricultural and agri-food stakeholders) who meet to

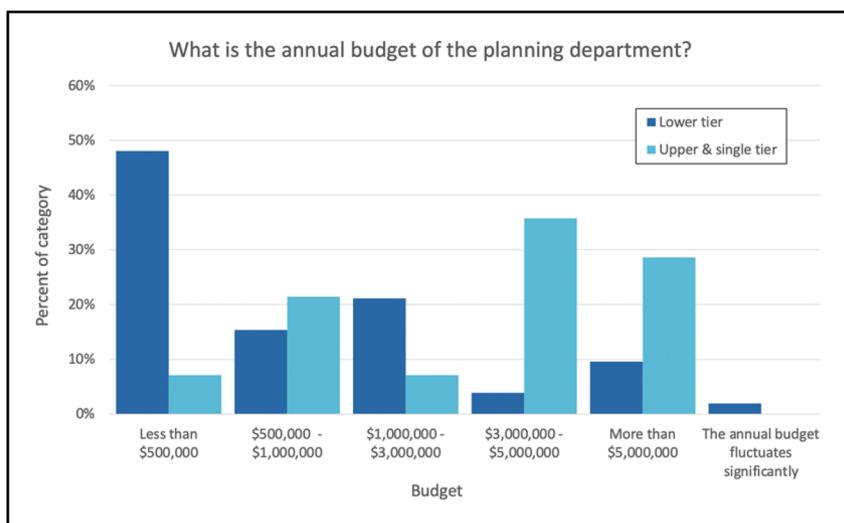


Figure 5: Planning department annual budget (Survey and FIR data) [34].

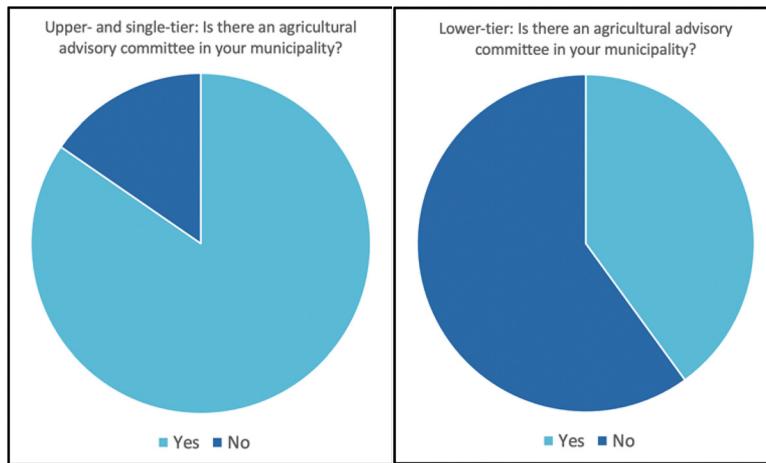


Figure 6 & 7: Presence or absence of an agricultural advisory committee (Survey data).

discuss agricultural related issues and priorities. Municipalities in Ontario are not mandated to have an agricultural advisory committee, but those who do generally benefit from the agricultural lens that the committee brings to the decision-making table [13].

Figure 6 shows the number of upper- and single-tier municipalities in our study area that have an agricultural advisory committee. Similarly, Figure 7 shows the same for lower-tier municipalities. Agricultural advisory committees represent a unique type of capacity. They offer a platform for coordination for the agricultural community but also provide a space for the municipality to consult with the agricultural community on a regular basis. Municipalities who have an agricultural committee generally expressed that there were several benefits associated with strengthening relationships with the agriculture community. However, experiences were not consistent and some municipalities felt that the agricultural advisory committee was underutilized and not well integrated with municipal staff and decision-making processes. Several other municipalities expressed that they would like to have an agricultural advisory committee, citing benefits associated with coordination, collaboration, and strengthening communication.

4.2.4 How frequently does the planning department or council deal with agriculture and agri-food related issues?

We also asked elected officials and planners how often they deal with agricultural and agri-food related issues. Figure 8 depicts the frequency that elected councils and municipal planners reported dealing with agricultural and agri-food related issues. It can be observed that both council and the planning department deal with agriculture and agri-food issues on a relatively consistent basis. Planners reported most often that they dealt with agriculture and agri-food related issues on a daily or weekly basis. The majority of elected officials on the other hand, report dealing with agriculture and agri-food issues on a monthly or annual basis. Considering Figure 8 in conjunction with the scatterplots in section 4.2.1 raises a series of questions about allocating planners based on land area, in considering that agriculture, as a land-based activity, is frequently on the agenda of municipalities to deal with.

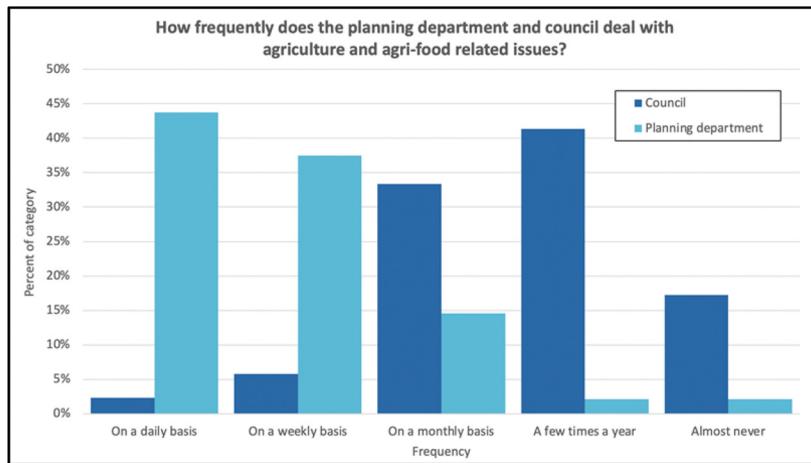


Figure 8: How frequently council and the planning department deals with agriculture and agri-food related issues (Survey data).

4.3 Contributions and challenges to municipal capacity

The following section presents the findings from the qualitative and descriptive components of data collection including results from survey questions (planner and elected official samples) and semi-structured interviews (planner sample). Planner and elected official experiences with, and observations related to, supporting and building capacity for agricultural issues were organized into themes: contributions to capacity (e.g. internal and external resources and relationships) and challenges (e.g. budgetary or policy-related barriers, etc.) to capacity.

Intergovernmental collaboration is a contribution to capacity that emerges overwhelmingly at the lower-tier level of government, with planners indicating that relationships with their upper-tier counterparts, conservation authorities, non-governmental organizations, as well as other local municipalities is an essential component of their capacity. The emergence of intergovernmental collaboration at the lower-tier level reflects the reality that lower-tier municipal departments do not necessarily have the staff or funding resources to attend to matters beyond daily operations and processing of planning applications. Policy or strategic planning for a variety of community needs is often an arduous process for these departments. As was reported by many lower-tier planners working under this scenario, reliance on upper-tier counterparts is critical to capacity. As one planner expressed, “I’m always pushing for stronger collaborations with the region and with other groups...so we can be involved but not be carrying the heavy load of it” (lower-tier planner).

A relationship between planning and economic development departments was also noted as a contribution to capacity. In the semi-structured interviews, planners were asked about their department’s relationship with the economic development department where one existed (i.e., do these two departments work closely together? Are they joined into one department? Is this relationship valuable when dealing with agri-food issues?). The majority of responses indicate that a relationship between planning services and economic development does exist and is particularly relevant when dealing with agricultural and agri-food

matters. When asked about this relationship, one county level planner mentioned the following: "Yes, definitely. We wouldn't be able to do what we do without our economic development staff... [in planning] we often get into the land use aspects of the policy side... and the economic development side is looking at how we can support from a business and promotion perspective, and so the two are important and so that's why we've identified early on that we need to have a relationship".

A culture of agriculture was a contribution to capacity that indicated those municipalities in the study area where agriculture is a predominant industry and where a significant number of staff members had stronger exposure to rural and agriculture issues either through formal experience (educational or workplace) or through living in an agricultural community. These elements of agricultural character and staff exposure create a 'culture of agriculture' within the community that assist with municipal capacity. This natural orientation towards supporting agriculture is expressed by planners through staff exposure and awareness of issues, but also through council composition and decision-making. A culture of agriculture is not only found in municipalities with significant agricultural land area. For example, the City of Hamilton has a division of planners dedicated to rural and agricultural planning matters, demonstrating a level of dedication and willingness to support agriculture in the community.

Recognizing farmers as experts and building relationships and communication networks with the local agricultural community was identified as a significant aid to capacity. Though we did not ask any explicit questions pertaining to communication with farmers or agricultural community members, this theme emerged naturally when participants were commenting on the resources they make use of when making planning decisions related to agriculture. Whether it be through agricultural advisory committees, site visits to farms, or phone calls to the farming community, planners expressed the importance and value of reaching out to local farm operators to help inform planning processes and decision-making.

The presence of agricultural expertise on council was a contribution to capacity mentioned by planners and elected officials across both municipal levels. This contribution to capacity involves either one or more councillors who have some level of agricultural expertise or awareness, usually in the form of past or present experience in agriculture and agri-food but also including through roles on local agricultural groups or committees. Not surprisingly, the majority of responses indicating an agricultural presence on council were from lower-tier municipalities and in particular, from lower-tier municipalities that inhabited a general 'culture of agriculture' whereby the industry was integral to the character of the community. A planner from a municipality with this background explained, "we also work in a municipality where the majority of our council is actively involved or they are from a family that is actively involved... it is certainly a benefit to have people with varying backgrounds" (lower-tier planner).

Competing urban priorities is a challenge to capacity experienced across all municipal levels. The two levels that were the highest indicators of competing urban priorities included lower-tier municipalities and regional governments. Competing urban priorities was commonly mentioned by elected officials as a matter of balancing competing interests (urban/rural) and often, a lack of understanding or awareness of the specific needs of agriculturally-productive areas is cited as a reason for continued urban pressure. For councillors, balancing the interests and needs of urban and rural residents, as well as industry stakeholders are key to their job. Determining how to bridge the apparent 'divide' between urban and rural areas and to make decisions that are mutually beneficial creates challenges for capacity to support agricultural needs.

A lack of staff capacity was expressed as a difficulty in the semi-structured interviews conducted with planners. Most planners indicated that increased staff capacity would be an overall benefit to their functioning, but they also recognize that hiring more staff is bound by the needs of the municipality, in addition to financial constraints. Hiring more staff is seemingly described by some participants as an aspirational goal for building capacity. A lower-tier planner mentioned, “I could always use more staff”, and followed up with stating that “there are capacity issues and [at] every municipality you’re going to find that, council is loath to hire staff because it’s the taxpayer’s money that pays their salaries, and they’ve been voted in to keep the tax base low”. Participants also described the impacts of a lack of staff resources. For example, “in terms of any policy focus, [we have] kind of limited abilities because of working on development applications. We don’t have significant time for [policy planning related to agriculture] (lower-tier planner)”.

A lack of provincial guidance on matters relating to agriculture and agri-food was also mentioned frequently by planners during the semi-structured interviews. This lack of provincial guidance manifests in a variety of ways as indicated by participants including a lack of education tools, frustration over a perceived inaccessibility to agricultural resource planners (provincial staff), the perceived gap between provincial interests and local realities, and unclear policy and implementation guidelines. The word ‘clarity’ was mentioned numerous times by planners, usually relating specifically to clarity around provincial policy, interests, and implementation. As one planner noted, “I don’t think it’s a capacity issue. It’s more of [an issue] of clarity on how to implement policies correctly and to the expectation of the province and various ministries (lower-tier planner)”.

Policy-related barriers were noted by planners and elected officials as a barrier to effective support of agricultural communities and their needs. Policies that present these challenges may include those at the municipal, county, or regional level, but provincial policy is cited most frequently. Frustrations expressed by planners and elected officials include outdated policy that does not account for new and emerging changes in agriculture; an overabundance of policy that creates burnout among farmers, council, and staff, in terms of accounting for permissions across each policy area, and; a lack of clarity regarding the transmission of provincial policy to a local context.

Planners also mentioned the **complexity of the multi-jurisdictional planning framework** in Ontario as a challenge to enhancing capacity. In the study area for this project, municipalities need to consider a plethora of planning documents including the Planning Act, Provincial Policy Statement, Greenbelt Plan, Growth Plan, Oak Ridges Moraine Plan, and Niagara Escarpment Plan. In addition to these overarching policies and guiding documents, each level of government (provincial, regional, county, lower-tier) will have official plans, strategies, and zoning bylaws to implement and adhere to when making decisions on the ground. The policy and regulatory requirements that planners and elected officials must consider when making decisions related to agriculture is incredibly complex and as a result, inhibits capacity to respond in a clear, consistent, and timely manner. For elected officials, understanding who has the authority to make specific decisions is frequently cited as a challenge when making decisions in overlapping jurisdictions.

5 CONCLUSION

There are explanations for the divergent planning capacity that exists across Ontario’s municipalities. Some municipalities are simply bigger – they have a larger population and, in turn, more related growth. Other municipalities have given Planning Departments a much larger mandate. Some have responsibility solely in the field of land use planning while others may

have expanding mandates that cover topics ranging from clean water to affordable housing. While this divergent capacity is neither ‘good’ nor ‘bad,’ it does speak to the ability of municipalities to respond to evolving issues, consult with ratepayers, develop options and strategies, and contribute to good governance.

Food production is a key activity for many rural municipalities within Canada and around the world. It contributes to the economic, social and environmental health of these communities and it is foundational to life. Clearly, there is a broad public interest in ensuring that agricultural activity is sustainable, contributes to farmer livelihoods, and produces healthy, nutritious food. It is in this context that quality analysis resulting in sound planning decisions are crucial. As we explored this capacity in the Greenbelt of Ontario, Canada, it is evident that different municipalities make important decisions in terms of their capacity to interact with the agricultural sector, develop policy, respond to evolving issues, and make planning decisions that enhance agriculture and related agri-food activities. These findings reflect the theory of transformative incrementalism, which identifies power and political will as central to incremental efforts towards change in food policy and practice [39]. Transformative incrementalism reflects on the critical role of values and beliefs, as well as praxis and outcomes in supporting agriculture [39]. Our research also noted the important role of values and political will that either serve to advance agriculturally supportive policy or hinder its development.

This paper is based on research that surveyed planners and elected officials within the most heavily-populated region within Canada. This could be described as a contested landscape where agriculture, urbanization, and a range of other land uses collide. In particular, we investigated current and evolving agricultural issues, the nature of planning decisions, and the capacity of municipalities to respond to changing priorities and trends. Through analysis of our data, we were able to identify contributions and challenges to municipal capacity. The results of this analysis also provides insight into what municipalities can do to facilitate better outcomes. While a number of specific opportunities were identified to build municipal capacity, these recommendations fall under three key headings: education, structure and relationships.

Education: Education is a broad topic that includes the importance of on-going training that can help planners to understand agriculture, related policy, and the connections to planning. Training can also help to enhance competencies and soft skills to contribute to a positive interaction with the farm community. It also speaks to the role for professional planning organizations to develop and offer training as well as universities (that can contribute to both education and research).

Structure: Structure encourages municipalities to think about how they are offering planning services connected to agriculture and the farm community. A strong relationship between planning and economic development staff for example can help municipalities to speak with a single positive voice and support policy which collectively advances a shared vision for agriculture and agri-food. While there are different ways to achieve this (for example articulate and pursue common goals) there are opportunities to coordinate and blend these activities within a single department. Likewise, an awareness and positive relationship with other levels of government (province, other municipal governments, etc.) can contribute to enhanced outcomes.

Relationships: Relationships and dialogue are at the core of all planning activity. Building a positive relationship with the farm community is critical to planning success. Understanding the needs of farmers and other stakeholders within the agri-food system can help to ensure that decisions are relevant, timely, and supportive of the long-term sustainability of the agricultural system.

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