

7-1-2020

A Declaration of Interdependence: An Analysis of Multilevel Governance and the Role of Municipal Governments as Climate Policy Entrepreneurs

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A Declaration of Interdependence:
An Analysis of Multilevel Governance and the Role of Municipal Governments as Climate Policy
Entrepreneurs

Subject Keywords: Climate Emergency Declaration, multilevel governance, Emergency
Management policy, normative policy

Geographical Keywords: Ontario, Toronto, Guelph, Waterloo

MPA Research Report

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

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July 2020

ABSTRACT

Since March 2019, municipalities in Ontario have become increasingly conscious of the role of local government in addressing the global climate emergency. Although minor departmental initiatives such as green infrastructure development policies are understood as environmentally conscious, the larger policy network of municipal governance has only recently entered the climate change mitigation and adaptation policy field. Declarations of climate emergencies are a modern way for municipal governments to signal both interest and intended action in climate change policies. In one year, Ontario municipal climate emergencies increased from 0 to 47, with the 47 municipalities representing nearly 90% of Ontario's population. Such interest prompted this analysis of the policymaking structure of local government and the means by which climate change policy could be introduced and implemented. Policymaking and capacity theories are used to determine how municipalities can work with upper levels of government and advocacy groups in order to engage with the policymaking process from a climate change perspective.

ACKNOWLEDGEMENTS

I would first like to thank my research supervisor, Dr. Zack Taylor, for making sense of my ideas and ultimately supporting my final, unplanned attempt at a major research paper. I would also like to thank the program Director, Dr. Joe Lyons, and the entire program faculty for supporting the 2019/2020 MPA cohort and ensuring that a global pandemic would not disrupt our academic and professional aspirations.

I would also like to thank my mother, Janet, my partner, Luke, and all of my family for believing I could finish my papers when I was unable to even imagine, let alone write, a conclusion.

I would lastly like to thank the cohort of students I had the pleasure of meeting throughout this degree, with special thanks to the women with which I was lucky enough to share the classroom. Without the near-daily encouragement of my new friends and peers, I surely would not have been as successful in my endeavours. Altruism and academia rarely interact, however the faculty and students I had the privilege to work with this past year prove otherwise.

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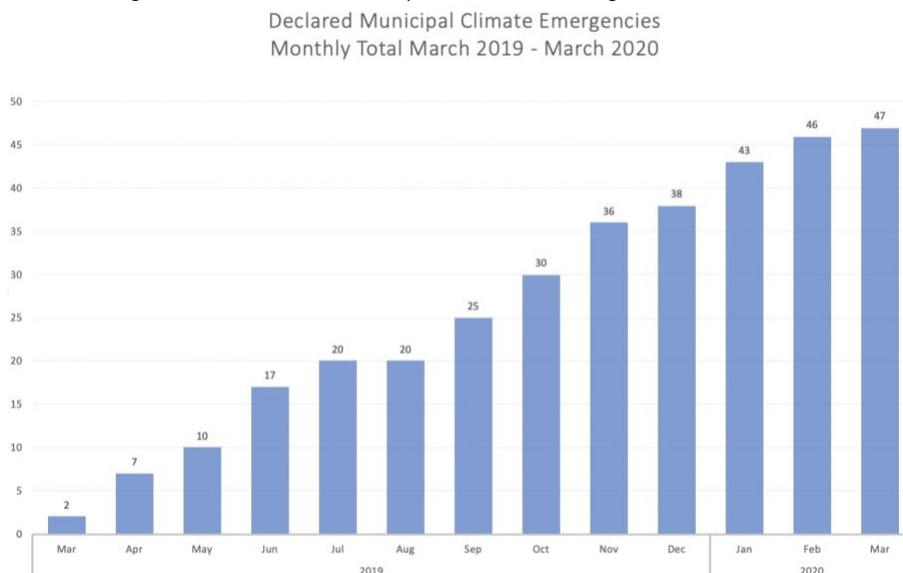
Introduction

Multilevel governance and the policy process are often discussed with regard to the capacity, role, and influence of local government. Constitutionally, Canada's municipal governments may be considered "an ideological construct" (Good 2019) at large, due to their status as provincially mandated corporations with predominantly non-partisan elected officials. Traditional thought also assumes a "policy taking" rather than "policy making" responsibility for municipal policy analysts (Gore 2010) due to the character of municipalities under provincial and federal jurisdiction in Canada (Côté and Fenn 2014). As the lowest level of government, municipalities are not awarded the same breadth of capacity or influence in policy implementation as their federal and provincial counterparts, resulting in a sense of stagnation or sub-standard permanence regarding policy making as a tool for decision making and problem solving. This is not to say that Ontario's municipalities do not have a policymaking role. Indeed, municipal policy making is a democratic duty of elected councilors (Municipal Act 2001 SO c 25 s 224), while subsequent policy research and implementation are responsibilities of non-elected municipal staff (s 227). Much like its overall governance perception, municipal policy must contend with limited capacity and influence relative to other municipalities, regional governments, and the Province.

The purpose of this research is to demonstrate the policy making capacity of municipalities in the context of the climate crisis. This research builds on existing emergency management (see Henstra 2013; Labadie 2011; Comfort 2007), intergovernmental relations (see Côté and Fenn 2014; Good 2019) and climate change mitigation governance (see Smart 2019; Gaddy, Clark and Ryan 2014) studies, adding the element of Climate Emergency declaration and subsequent action to the discussion of multilevel governance and policymaking in Ontario. Emergency management policy has been on stark display throughout 2020 as all levels of government have struggled to address the multifaceted nature of living through global health, economic, and political crises. As global governance structures continue to adapt to the reality and permanency of emergency management, municipalities are positioned to expand their legislative capacity and become more innovative in response to the unpreparedness of climate change

management. Numerous Canadian municipalities have declared Climate Emergencies as a first response measure, including 47 Ontario municipalities as of March 2020 (see Figure 1.1).

Figure 1: Declared Municipal Climate Emergencies Over Time



While the figure represents less than 11 per cent of the total number of municipalities in Ontario, the collective population of the municipalities represents nearly 90 per cent of Ontario, as large single tier and upper tier cities and regions have agreed to prioritized climate crisis management (see Table 1).

Table 1: Alphabetical List of Ontario Municipalities who have officially declared a Climate Emergency

Municipality	Tier	Region	Date of Declaration	Population
Amherstburg, Town of	Lower Tier	Essex	2019-11-12	23,239
Barrie, City of	Single Tier	Simcoe	2019-10-07	149,302
Brampton, City of	Lower Tier	Peel	2019-06-05	696,975
Brant, County of	Single Tier	Brant	2019-11-26	38,419
Brantford, City of	Single Tier	Brant	2019-11-12	104,902
Burlington, City of	Lower Tier	Halton	2019-04-23	190,194
Caledon, Town of	Lower Tier	Peel	2020-01-28	75,969
Central Elgin, Municipality of	Lower Tier	Elgin	2019-10-28	13,812
Chatham-Kent, Municipality of	Single Tier	Chatham-Kent	2019-07-15	105,666
Clarington, Municipality of	Lower Tier	Durham	2020-03-02	100,562
Cobourg, Town of	Lower Tier	Northumberland	2019-11-25	20,170
Durham, Regional Municipality of	Upper Tier	Durham	2020-01-29	645,862

Goderich, Town of	Lower Tier	Huron	2020-01-13	8,115
Greater Sudbury, City of	Single Tier	Sudbury	2019-05-28	168,813
Halton Hills, Town of	Lower Tier	Halton	2019-05-06	64,290
Halton, Regional Municipality of	Upper Tier	Halton	2019-09-11	548,435
Hamilton, City of	Single Tier	Hamilton	2019-03-27	574,263
Kenora, City of	Single Tier	Kenora	2019-09-17	15,483
King, Township of	Lower Tier	York	2019-07-08	26,593
Kingston, City of	Single Tier	Frontenac	2019-03-05	135,204
Kitchener, City of	Lower Tier	Waterloo	2019-06-24	26,790
London, City of	Single Tier	Middlesex	2019-04-23	426,139
Meaford, Municipality of	Lower Tier	Grey	2019-11-18	11,694
Milton, Town of	Lower Tier	Halton	2019-07-22	129,334
Mississauga, City of	Lower Tier	Peel	2019-06-19	769,050
Newmarket, Town of	Lower Tier	York	2020-01-13	89,496
Niagara-on-the-Lake, Town of	Lower Tier	Niagara	2020-02-24	18,865
Oakville, Town of	Lower Tier	Halton	2019-06-24	212,551
Ottawa, City of	Single Tier	Ottawa	2019-04-24	1,028,514
Peel, Regional Municipality of	Upper Tier	Peel	2019-10-24	1,484,000
Peterborough, City of	Single Tier	Peterborough	2019-09-23	86,469
Pickering, City of	Lower Tier	Durham	2019-12-16	98,817
Prince Edward, County of	Single Tier	Prince Edward	2019-05-28	25,406
Sarnia, City of	Lower Tier	Lambton	2019-06-17	74,779
St. Catharines, City of	Lower Tier	Niagara	2019-04-29	141,294
St. Thomas, City of	Single Tier	Elgin	2020-02-10	41,795
Stratford, City of	Single Tier	Perth	2020-02-10	33,434
Tecumseh, Town of	Lower Tier	Essex	2019-12-10	24,064
Thunder Bay, City of	Single Tier	Thunder Bay	2020-01-13	112,740
Toronto, City of	Single Tier	Toronto	2019-10-02	2,965,713
Vaughan, City of	Lower Tier	York	2019-06-04	325,678
Waterloo, Regional Municipality of	Upper Tier	Waterloo	2019-10-09	583,500
West Nipissing, Municipality of	Single Tier	Nipissing	2019-04-23	15,014
Whitby, Town of	Lower Tier	Durham	2019-06-24	136,594
Wilmot, Township of	Lower Tier	Waterloo	2019-09-23	21,978
Windsor, City of	Single Tier	Essex	2019-11-18	324,048
Woolwich, Township of	Lower Tier	Waterloo	2019-09-24	26,751

Climate emergencies have become increasingly popular around the world and at all levels of government from local to national. Although motivation to declare among Ontario municipalities is indeterminable as of yet, the sustained growth in local government interest represents a need for a reconsideration of policymaking roles and norms at the municipal level. While the declaration of a Climate Emergency does not inherently solve any assumed or anticipated emergencies associated with climate change, the framing of climate change as an emergency functions as a signal to legislators and policymakers. The policy process for emergency management policy is a unique policy field for all levels of government, although especially for municipalities as policymaking is not a clearly defined responsibility nor a familiar one for many smaller local governments. Although noted in the *Municipal Act, 2001*, policymaking is legislated as a role for councilors with no further description other than development and evaluation; the relevant or allowed subjects, jurisdictions, and general capacities of policymaking are simply referred to as within the scope of the municipality's interests (s 8[1]).

Clarity though, is not necessarily a product of a defined subject, as emergency management policies can be as ambiguous as the term itself. Emergencies, the style of management, and the gravity of policy are each inconsistently or rigorously defined in the public and professional discourse (Juillet and Koji 2014). Intergovernmental policymaking may suffice in certain circumstances, where municipalities are consulted or have extended decision making powers, as in the case of provincial development and planning policy working to *guide* municipal development rather than directly oversee.¹ No *Climate Emergency Provincial Policy Statement* exists at this time, however, and the Province has not directed municipalities to create a benchmarking system to measure provincial climate policy commitments. Climate Emergency governance and policymaking, therefore, is both an uncharted and a pertinent opportunity for municipalities.

¹See 2020 Provincial Policy Statement section 4.9

The following analysis outlines the role of emergency management and policy from a multilevel governance perspective. The provincial and federal relationship to municipalities in relation to an emergency declaration is studied in order to highlight the successes of intergovernmental cooperation and the drawbacks of unclear and undefined power delegations. This discussion of intergovernmental cooperation leads to the thesis of intergovernmental dependence and provides a foundation for understanding the climate emergency as it has manifested at the local level in Ontario. The existing footprint of emergency policy in Ontario reveals the viability of an expanded role for municipalities should climate emergencies be considered in a traditional emergency management style. The analysis culminates in a discussion of policy capacity and governance theory to provide municipalities with the means to assess capacity from a climate policy perspective. This research demonstrates how and when municipalities are able to develop and implement policy and the interdependence of governments in creating policy at the local level.

Multilevel Governance and Policymaking

The Municipal Role: Issue Identification Through Process Norms

The role of a municipality in the policymaking process is acknowledged and understood through the lens of provincial oversight, despite the complexity of municipal governance and policy not being outlined or defined in a productive or comprehensive manner. From the multiple levels of government *within* this lowest level of government, to the number of channels available for policy promotion and enactment, the policy process for municipalities in Ontario remains significantly more nuanced than that of its provincial and federal counterpart. Municipalities are tasked with observing a network of issues available for policy consideration and measuring the risk of policy action, as with any other level of government, yet without the formal designation or authority of a provincial or federal government.

Although generally irrelevant in the context of this analysis as diffusion and correlation between municipal government tiers is outside the scope of this research, understanding the role of Ontario's multi-tier system of municipal governance is necessary for understanding why municipalities rely on

normative procedures for policy action. Ontario’s municipal legislation footprint is large, looming, and is a primary reason for the growth of conventional, consorted, normative governance activity among municipalities. However, the non-normative (i.e. formal laws and regulations) legislated impact Ontario has over its municipalities includes defining the scope of authority delegated to single-, upper-, and lower-tier municipalities. Section 10(2) of the *Municipal Act, 2001* affords single-tier municipalities the power to pass by-laws in the following areas:

1. Governance structure of the municipality and its local boards.
2. Accountability and transparency of the municipality and its operations and of its local boards and their operations.
3. Financial management of the municipality and its local boards.
4. Public assets of the municipality acquired for the purpose of exercising its authority under this or any other Act.
5. Economic, social and environmental well-being of the municipality, including respecting climate change.
6. Health, safety and well-being of persons.
7. Services and things that the municipality is authorized to provide under subsection (1).
8. Protection of persons and property, including consumer protection.
9. Animals.
10. Structures, including fences and signs.
11. Business licensing. 2006, c. 32, Sched. A, s. 8; 2017, c. 10, Sched. 1, s. 1.

Similarly, section 11(2) and 11(3) of the *Municipal Act* provides lower-tier and upper-tier municipalities the same by-law creating powers in the same areas, in addition to the following areas outlined in section 11(3):

1. Highways, including parking and traffic on highways.
2. Transportation systems, other than highways.
3. Waste management.
4. Public utilities.
5. Culture, parks, recreation and heritage.
6. Drainage and flood control, except storm sewers.
7. Structures, including fences and signs.
8. Parking, except on highways.²

While the areas are similar for all three tiers of municipal government, the scope, or “sphere of jurisdiction”, in which a by-law may be created, applied, or nullified varies. Subsections four through eight

² Further stipulations are addressed in the legislation, however for the purpose of this research, the above delegations are sufficient.

and subsection 11 of section 11 of the *Municipal Act* are written to address the varying exceptions and applications of by-laws created by lower- and upper-tier municipalities. As well, subsections three through five of section 10 address the same variation for single-tier municipalities. That is to say, conclusively, the ambiguity surrounding multilevel municipal by-law creation is written into the legislation governing such creation.

The municipal role in policymaking and governance is further complicated by the language used to delegate authority. The *Municipal Act*, as noted above, confers powers to municipalities to pass *by-laws*. *By-laws* differ from *policies*, and both differ from *resolutions*, all of which are used interchangeably and under the scope of authority delegated to municipalities under various sections of the *Municipal Act*. Essentially, by-laws are pieces of municipal legislation that govern actions within the municipality and can result in legal consequences for non-compliance; policies may provide guidance or governance to staff, councillors, or citizens and are typically included in municipal official plans; and, resolutions are records of council deliberation and, while less formal, “often express the municipality’s position on issues or concerns about existing government policy” (Public Health Ontario 2014; Ministry of Municipal Affairs and Housing 2019). From a governance perspective, by-laws are therefore the most legally binding, followed by policies, and then resolutions, however all reflect the democratic process of issue consideration and decision making.

As policymaking is the subject of this analysis, the linguistic significance of the term “policy” is aptly considered. Municipalities are not bound to a governing style as made evident by the suggestive enforcement of by-law creation in the *Municipal Act*, in addition to the various options for council decision making. With regard to municipal policies, the *Municipal Act* does acknowledge that municipalities have policies, but does not address the creation and implementation process in the same extensive manner in which by-law creation is addressed. As well, the *Municipal Act* equates resolutions to by-laws, as the phrase “or resolution” follows the word “by-law” nearly every time it is mentioned in the

legislation (see sections 23.1 [3], 23.4 [1], 44 [14], and 190 [1 c, d]). This congruence is in conflict with the definitions provided by the Province quoted above, as resolutions reflect issue positions and by-laws reflect a method of legal recourse for a municipality. While section 8 of the legislation allows for broad interpretation of the *Municipal Act* by municipalities, the strong enforcement in some areas of governance and not in others creates a discrepancy in understanding how and when municipalities may develop and implement policies. Despite this uncertainty, normative governance has provided a foundation for municipalities from which to work, as upper-, single-, and lower-tier governments have assumed similar roles across the province and delegated authority within the municipal structure in order to accommodate any ambiguity (Taylor 2016, 12). And while normative behaviour has been sufficient, norms surrounding municipal climate governance do not yet altogether exist.

Taylor (2016) writes that process-oriented governance is predicated on norms, as the policymaking process demands the competence and capacity provided by normativity. However, the novelty of municipal climate policymaking has not yet created its own norms. Ontario municipalities began declaring Climate Emergencies in March of 2019, and no measurable or comparable policy outcomes or initiatives resulting from the declarations are available yet. The role of municipal governance in policymaking is ambiguous and could be said to rely on supportive norms. Normativity is not inherently an unsuitable precedent, rather it merely does not have a place in the climate governance conversation at this time. The process of creating, testing, and adhering to norms is time intensive and climate policy must be more reactive if not proactive. This research posits that municipalities are poised to undertake a stronger policymaking role in the understudied area of climate emergency preparedness and mitigation. And if the existing role of municipal governance is either austere or reliant on process norms, a new means for policymaking is a necessity for novel climate change policy solutions.

The Federal Role: Climate Governance

Ambiguity, though, does not exist solely at the municipal level within and between tiers. The consensus surrounding federal-municipal relations has been continuously redefined throughout Canada's history,

and redefined by the federal government. Recent redefinition in 2004 saw the New Deal for Cities and Communities from the Martin Liberal Government in an effort to assist in climate mitigation and adaptation measures. The financial and social commitment to assist municipal governments with infrastructure development and community building is one of the earlier consolidated efforts to include municipalities in the discussion and action of climate change mitigation, as the New Deal was developed with context from Canada's recent Kyoto Protocol commitments in the early 2000s (Shaker 2004). The New Deal, while not an emergency policy, does stress some urgency in the climate change conversation between government actors and policy makers. The following discussion reviews the role of the federal government in creating, adapting, and/or promoting municipal climate governance interests since 2004 with a focus on how Liberal and Conservative governments have addressed municipalities and what municipalities have been able to accomplish over 16 years of federal policy fluctuation.

The role of the federal government relative to municipal policymaking is not to provide a framework within which municipalities may interpret and develop a normative understanding of legislation best practices. Rather, the federal government acts in a more acute and objective manner, imposing initiatives and policies for municipalities to accept. Federal-municipal governance can operate in such a controlled manner due to the broadly comprehensive nature of federal policy, which must account for national needs over local demands (Horak 2012, 349). However, the nature of climate change as a global emergency, dependent on the acknowledgement and action from everyone, demands national leadership for climate action diplomacy. Federal initiatives addressing climate change are created for international compliance yet must be enacted through local means. This indirect relationship can limit the effectiveness of federal agreements.

Cities account for over 70% of global emissions (Federation of Canadian Municipalities 2020a). This does not mean that municipal government operations are detrimental to climate change mitigation efforts, but rather that the overall operations of individuals and, more significantly, corporations within

cities contribute to carbon dioxide (CO₂) emissions at a far greater scale than the operations in rural areas. Without a strong policy and action relationship between municipalities and the federal government, commitments to reduce national emissions by 30% below 2005 emission levels by 2030 (Environment and Climate Change Canada 2020) will not be possible. The key issue regarding the federal question in the context of this research is, how does federal climate governance policy include and support municipalities? And, if it does not include or support municipalities, how can they engage with the policy in a meaningful way?

While not directly supportive of or associated with municipalities in most instances, the recent efforts of the Liberal federal government, such as the Canada Infrastructure Bank and Paris Agreement commitments, have demonstrated a willingness to address climate change as an issue and a crisis, and has opened a policy window for climate action policy development. Federal partisanship is not a significant topic of a discussion in this analysis, and is only relevant in the context of highlighting the relationship between the policy process and the level of government at which it takes place. Climate change, despite increasing efforts from the scientific community to provide and communicate the imminent crisis caused by the Anthropocene, is a partisan political issue. The urgency at which climate change must be mitigated and planned for is a matter that can be traced on the political spectrum, with Canada's current Liberal leadership placing more urgency with the matter than the former Conservative federal leadership. This tracing is most easily understood through the procedural process of Bill C-311, a federal climate action that intended to set targets for emission reductions at a national level through mitigation regulations. Bill C-311, the Climate Change Accountability Act, was ultimately not accepted by the Senate, without debate, after nearly two and a half years of consideration by the House Standing Committee on the Environment and Sustainable Development. From its introduction in June 2008 through its dissolution in November 2010, the federal Conservative government was not supportive of the New Democratic Party-backed private member's bill and effectively determined the negative

outcome of Bill C-311, which was the only climate change mitigation-related legislation at the time (Climate Action Network Canada 2011; Galloway 2010).

While emergency policy and climate action for municipalities is not dictated or addressed by the federal government, federal leadership on climate change is becoming increasingly relevant and demanded. As cities move forward in declaring climate emergencies, the relationship between municipal policymaking and federal climate action commitments should be reassessed. Climate change mitigation and adaptation does not occur in a vacuum and requires extensive multilevel government cooperation. The tools for policy coordination between the federal and municipal governments are further discussed in later capacity analyses, however the above discussion on federal initiatives provides necessary context as to how the policy ideas have been and may be interpreted.

The Provincial Role: Financing Policy

As the intermediate level between municipal and federal government, the provincial role in the policy process is directive, both in terms of the legal and financial authority provinces maintain over municipalities (Henstra 2018). The federal government's disengagement with municipalities requires provinces and territories to manage their legislative discretion in order to provide for both the existence and success of municipal operations and governance. Despite the growth of Ontario's cities as international urban centers and the moves toward greater municipal self-governing powers in the *Municipal Act, 2001* and charter city suggestions, Ontario remains "firmly in control" of municipal governments, especially in terms of policymaking and policy financing (Côté and Fenn 2014, 3; Siegel and Tindal 2006). While the policymaking powers of municipalities have been previously considered, the following discussion focuses less on the limitations of the policy process for municipalities and more on the financial responsibility of Ontario as a policymaking body.

Much of the existing literature on provincial policymaking for municipalities in Ontario is critical of the power imbalance between the government levels. Côté and Fenn (2014) discuss the contention of provincial-municipal relationships, suggesting that municipalities are becoming more relevant as

government actors as larger cities become urban economic development centers, and that the antiquated understanding of provincial oversight in municipal policy must be adjusted. Provincial-municipal relations present a theoretical arena for management theory debate, whether the traditional New Public Management ideas of efficiency and privatization or more recent ideas from New Public Service's more personalized resident-focused approach are better suited to address the needs of a multilevel democratic venue (Mintzberg and Bourgault 2000). While this research does not present quantitative evidence supporting a relationship management strategy that combines the interests of both Ontario and its municipalities, the following explanation of the provincial policy process does provide a lens to examine the provincial role in municipal climate emergency management.

Examining the provincial policy role provides the clearest understanding of how municipalities may use climate emergencies to become policy entrepreneurs. Since Ontario is the primary legislative body overseeing municipal operations, authority to develop and implement policies at the municipal level must be contained within the context of provincial legislation. Impediments to municipal policymaking authority are contained in, but not restrained to, the language of provincial legislation that limits the scope and role of municipal governance. Particularly surrounding the policy area of climate change mitigation and adaptation, "issues of finance and autonomy" (Gore 2010, 31) are at the forefront. Policymaking requires policy financing as part of the change implementation process. In 2017, the City of Toronto estimated that climate change mitigation and adaptation efforts over the coming years would cost between \$320 million and \$886 million (Carvalho 2018, 11). Detailed budgets for projects, programs, and policies planned by Toronto over the period are not within the scope of this research, however the overall cost helps to highlight the demand for municipal action and the need for provincial assistance. Henstra (2018) describes the provincial-municipal policymaking relationship as "relatively stable and predictable" (125) due to strong provincial oversight and regulation. While municipal policymaking does

occur through various methods and on multiple subjects, the process and subsequent policy is nevertheless normative, risk-averse, and subject to intense and direct scrutiny.

Such policy characteristics are reflective of the conservative financial state of municipalities (Côté and Fenn 2014). Municipalities are obligated to manage budgets and spending in accordance with provincial legislation and standards, ultimately limiting the fiscal capacity of policymaking. A notable example of provincial shortcomings in municipal policy financing is in infrastructure and asset management and maintenance. Municipalities are often criticized for the challenges that come with maintaining the significant capital asset that is physical infrastructure (such as bridges, road, and municipally-owned land) (Bird and Slack 2018), leading to greater involvement and assistance from Ontario's government. However, the introduction of asset management legislation such as Ontario Regulation 588/17 did not provide the financial assistance assumingly desired, and rather requires municipalities to update existing asset management strategies in order to more efficiently plan for lifecycle costing of infrastructure assets (Asset Management Planning for Municipal Infrastructure, O Reg 588/17). Asset management policy from the provincial government was created due to the fiscal burden municipal infrastructure disrepair *could* cause the province, while municipalities continue to struggle with infrastructure maintenance financing (Côté and Fenn 2014, 43). Based on this precedent, it is not difficult to imagine Ontario providing insufficient policy solutions for climate emergencies, especially considering the close association between infrastructure and climate mitigation and adaptation (Carvalho 2018). One facility where provincial policy and financial assistance converge is in the Ontario Financing Authority's Green Bond development lending program, however bureaucratic barriers limit the effectiveness of Green Bonds in Ontario and have consequently not be widely adopted by municipalities (Carvalho 2018, 24).

The provincial role in municipal policymaking is greater than that of the federal government, both in the authority of Ontario's oversight and autonomy limitation. Municipalities rely on provinces for

direction on all matters of governance, including those with limited policy precedent. Climate emergency declarations are increasingly popular throughout Ontario, from the largest cities and regions (Toronto, Peel) to very small towns (Clarington, Meaford). While governance autonomy would aid municipalities in developing policy more freely, climate change action is not centred on provincial-municipal power struggles. The multilevel approach to policymaking that currently exists requires far more collaboration from the multiple levels. The ambiguity of Ontario's municipal policymaking network may be diminished if, as governments move forward addressing climate change-related emergencies, municipal governments are provided greater legislative and financial liberty to pursue policy solutions.

Acts, Bills, and a Memorandum

Emergency Legislation in Ontario

Due to apparent barriers attributed to intergovernmental and multilevel bureaucratic ambiguity, climate emergencies and climate change may appear out of scope. However, emergency policy as it exists at the federal and provincial levels provides a plausible framework for climate change mitigation, adaptation, and prevention. Emergency preparedness and planning legislation such as the federal *Emergencies Act, 1985* and *Emergency Management Act, 2007* each address a potential state of emergency governance. While these Acts do not directly address municipal governance, the network within which emergency policy is contrived must be considered moving forward in addressing the global climate emergency. Additionally, the Association of Municipalities of Ontario (AMO) Memorandum of Understanding (MoU), the Ontario provincial *Emergency Management and Civil Protection Act, 1990*, and the recent Ontario *Coronavirus (COVID-19) Support and Protection Act, 2020*, are either directly related to or greatly involved with municipal governance and autonomous policymaking.

Emergency legislation exists at all three levels of government in Canada and is codified for the national and provincial governments. Declarations of emergencies and invocations of emergency legislation trigger something of a domino effect of aid availability and temporary special powers to different levels and ministries of government in order to manage issues outside of the normal scope of

government. The *Emergencies Act, 1985* exists to allow the federal government to take “special temporary measures” in order to ensure national public welfare remains intact (Emergencies Act, RSC 1985, c 22 [4th Supp]). Similarly, the *Emergency Management Act, 2007* further outlines ministerial responsibilities and actions to be taken in the event of an emergency in order to mitigate, prepare for, respond to, and/or recover from national emergencies (Emergency Management Act, SC 2007, c 15, s 2). The 1985 and 2007 emergency related Acts are similar in intent and purpose, differing primarily in how power is delegated and the scope in which powers can be used. For example, the *Emergencies Act* requires federal consultation with lieutenant governors prior to federal powers being implemented within a province (s 14, s 25) and cannot invoke or involve police authority within provinces, even if the province relies on RCMP police powers (s 20). The *Emergency Management Act*, alternatively, is more of a job description for the federal Minister of Public Safety and Emergency Preparedness, outlining the various duties of the role in section 4 of the *Act*. Both pieces of federal legislation address the international community and the potential need for a coordinated international response to an emergency, but do not address coordination with municipal governments, assumingly due to the provincial capacity to oversee municipal matters in the event of an emergency. Neither the 1985 or 2007 *Acts* specify a type of emergency that would constitute an emergency invocation, as that would be limiting; however, the language of military use in both, and the *Emergencies Act* section III and IV which outline emergency capacity in the event of international violence or force, or war with Canada and/or its allies (respectively), strongly suggest that federal emergencies commonly involve national or international conflict.

Invocation of a national emergency under these *Acts* comes when the provinces are assumed to be incapable of handling an emergency alone and require a unifying force (Swiffen 2020). A push for emergency management unity, however, should not be necessarily predicated by war. Provincial unity on climate emergency policy is difficult for reasons of political partisanship outlined in the previous section on federal governance. A province could be deemed incapable of handling the climate crisis by failing to

acknowledge it, made possible as some Conservative premiers have opted out of carbon-pricing or emission reductions (Wells 2018). A unified, democratic response to climate change is required in order to mitigate, prepare, respond and recover. In conversation with climate activist Naomi Klein, sociologist Barry Smart (2020) writes, “Fixing things will require ... the practice of a form of government that is able to implement policy initiatives that prioritise the commons” (28-29). As the Canadian commons begins to grapple with the effects of a warming climate and increases in extreme weather events, such as the deadly 2018 Quebec heat wave or the more frequent wildfires devastating western provinces, the unity of a national emergency may be required in order to enact comprehensive policy.

A national climate emergency would not only mean federal policy, however, as the invocation would result in further measures to be taken by provincial and municipal governments. The provincial emergency legislation in Ontario is formally limited to one Act, however the municipal legislative footprint also alludes to emergency powers and autonomy for municipalities. The *Emergency Management and Civil Protection Act, 1990* greatly emphasizes the responsibility of municipalities during emergencies, dedicating section 2.1, section 3, and section 4 of the legislation to the guidelines for municipal emergency management plans. And while both the province and municipalities are authorized to declare emergencies subject to section 7.0.1 and section 4(1), respectively, the authority of the province remains stronger and the Premier or Lieutenant Governor may terminate an emergency declaration at any time in any place in the province (s 4[4]). The strong powers Ontario’s premier maintains over municipal governance are made evident throughout this legislation, especially in section 7 which includes a dedicated subsection on “Powers of Premier, municipal powers” (s 7.0.3[2]). The premier has ultimate control over any emergency in the province and can delegate chief authority to any minister (s 7.0.4[1]) and direct municipal councils to assist other municipalities within the province (s 7.0.3[2b]). While such powers granted to the premier may seem authoritarian, section 13.1 (4) provides a necessary and useful limit to provincial emergency governance, stating “the Lieutenant Governor in Council may by order

authorize the payment of the costs incurred by a municipality in respect of an order made under this Act out of funds appropriated by the Assembly.” Former Ontario Deputy Minister Michael Fenn (Matheson, Fenn & Steele 2020) has stated that the municipal relationship with the province of Ontario is fundamentally financial; and this relationship is reliant on its fiscal roots inside and outside of emergencies.

Emergency Policy and Multilevel Governance

Ontario’s most recent and perhaps most dramatic emergency declaration is ongoing in the midst of the 2020 COVID-19 pandemic. Bills 187 and 189 from the Legislative Assembly of Ontario were quickly passed in the early stages of Ontario’s pandemic response in an effort to support municipalities and their residents. Bill 187, the *Municipal Emergency Act* amends the *Municipal Act* and the *City of Toronto Act* to allow municipal councils and boards to update procedure bylaws which would allow for electronic governance to promote physical distancing. Bill 189, the *Coronavirus (COVID-19) Support and Protection Act* amends meeting schedule timelines legislated under various acts pertaining to municipal administration, such as the *Development Charges Act* (Raponi 2020). These emergency response bills provide clarity for municipalities regarding administrative capacity during an extended pandemic emergency. In addition to these Bills, the formal emergency declaration on March 17th 2020 heavily impacted and continues to impact municipalities and their public health units. The state of emergency was invoked under the strong legislative authority of section 7.0.1 of the *Emergency Management and Civil Protection Act*, therefore establishing overarching emergency powers for Premier Doug Ford.

The appropriateness or timing of emergency declarations is not debated in this analysis, as pandemic emergency governance is a complex political field. The suitability of emergency legislation to create and enact climate change adaptation and mitigation policy at the municipal level is what this analysis is addressing. Climate change and COVID-19 are not the same. While the negative and deadly health impacts of extreme weather and rising global temperatures could be construed to define climate change and a health pandemic, an emergency response to what some governments perceive as a non-

imminent non-threat (Smart 2020) has not yet been realized. The emergency response to the 2020 pandemic, however, does illustrate the willingness to enact broad policy in the absence of a comprehensive plan due to the changing nature of the emergency. The emergency response also illustrates the means through which the province can invoke ultimate power while addressing the intricacies of municipal administration.

As part of this administration, Ontario's 1990 emergency legislation under section 2.1 requires all municipalities to create an "emergency management program" including a plan, public communication strategies, and staff and council training exercises. Although, by nature, emergencies are difficult to plan for, the provincial mandate represents a policy opportunity for municipalities to document a response mechanism for climate emergencies. The City of Toronto's 2017 Emergency Management Plan is a comprehensive example of provincially mandated municipal emergency management. The plan defines the roles of municipal staff and council, local boards and commissions in the event of an emergency; types of emergencies that may be encountered and the degree of response required; and risk assessment and response measures. As the types of emergencies outlined include floods, extreme heat or cold weather, storms, and fires (2017, 19), the Plan has prepared the City to respond to climate change-related emergencies. However, the Plan has not been updated since Toronto declared a climate emergency in 2019 and does not account for climate change as a threat category (19). This is all to say that the framework for climate emergency governance and policy exists in the emergency management program footprint set out by the province to which municipalities should adhere.

Correspondingly, the municipal autonomy framework need also be discussed in this analysis. Despite the understanding that multilevel government cooperation is required for effective climate change mitigation and adaptation policy and that policy solutions do not happen in a single-level vacuum, municipal autonomy and authority relative to provinces remains limited. The AMO MOU is a decisive work of municipal advocacy, promoting intergovernmental cooperation between Ontario and its

municipalities. The MOU is a joint agreement between Ontario and the Minister of Municipal Affairs and Housing and the AMO on behalf of all Ontario municipalities that emphasizes the need for provincial-municipal consultation, communication, and coordination on matters related to municipalities and the provincial level. The MOU does not grant municipalities decision making authority, but rather equates the provincial and municipal voices where municipal policymaking is concerned. The MOU, however, is merely a pillar of the climate emergency policy foundation, as emergency cooperation and coordination are not mentioned. Though the MOU may be considered a “peacetime” formality, not suitable for times of emergency management (Matheson, Fenn & Steele 2020), the organization nevertheless ensures a basis of mutual respect between levels of government, acting as a stimulus for further cooperative policymaking.

Essentially, the broad authority permitted by section 8 of the *Municipal Act*, along with the consultation agreement from the MOU place municipalities in a position of means without wealth – Ontario’s municipalities are recognized as having complex governance standards and administrative needs in the event of an emergency, yet must be told how and when to act by upper levels of government. The policymaking network of emergency management is stepwise, deductive, and highly regulated. Municipalities can operate within this network, however constrained they may be. Except emergency management programming is rarely at the forefront of a municipal governance agenda as emergencies rarely reach a level that requires complete intragovernmental management (Henstra 2013). Declarations of climate emergencies follow a similar pattern – municipalities do not have the potential actual emergencies associated with climate change at the forefront of their governance agendas due to the varied and non-immediate nature of climate change disasters (Fitzgerald 2020, 168). This framing of climate change as a policy issue has created a ceremonial and impractical understanding of climate emergency management. The climate emergency is an emergency that, based on its identifier, is foreseen and can be sufficiently planned for with extensive policy and programming. Yet the identified

“emergency” is not *enough* of an emergency, despite it being a catalyst for types of real emergencies such as those outlined in Toronto’s Emergency Management Plan. There remains a divide between climate emergencies and generally accepted emergencies, in addition to the divide between municipal emergency management and provincial emergency invocation.

Municipal Climate Emergency Declarations

What is a Climate Emergency?

Contextualizing policymaking from a legislative perspective outlines the operational reality of municipalities succeeding in climate governance and policymaking. Municipalities have been established as members of the public service, willing and able to act on matters of decided importance. Both in terms of emergency legislation and climate change mitigation and adaptation policy, municipalities are subject to the will of upper levels of government, primarily provincial. However, discretionary powers of emergency declaration are granted to municipal leaders per section 4(1) of the *Emergency Management and Civil Protection Act, 1990*. Forty-seven Ontario municipalities have declared climate emergencies since March 2019; and, while the act may be seen as a symbolic gesture and lacking substantive action, declaring a climate emergency remains a method for municipal councils to signal to their communities and to other public entities that addressing the impacts of the climate crisis is a necessary consideration regarding all matters of governance moving forward. Former Chief Resilience Officer for the City of Toronto, Elliott Cappell, understands climate emergency declarations to be “a starting point to getting all the different arms of government to move in the same direction ... [to] create a shared *lingua franca* on which to work and engage the public on the real scale of the challenge” (Cappell 2019). As all departments of municipal governments begin to address climate change, municipal operations will change in order to reflect new initiatives, procedures, and policies. Many climate emergency declarations made by Ontario municipalities include actions to further invest in and plan for climate change. These declarations are not full strategic plans, but rather visions that will lead to missions that will result in actions.

Climate emergency declarations have become an increasingly popular way for governments to signal their comprehension and capacity of climate change mitigation and adaptation. The 2019 Oxford Languages Word of the Year was “climate emergency”, due to the demonstrated “heightened public awareness of climate science and the myriad implications for communities around the world” (Oxford University Press 2019). Cohen (2020) similarly notes that the rise in governments addressing climate change with policy initiatives like Green New Deals also surged in 2019. With governments of all levels and sizes around the world beginning to understand the need for diplomacy and governance in reducing emissions and gravely altering material consumption patterns, the climate emergency has grown into a movement. However, should policy alternatives and climate governance fail to move forward at the pace of global average temperature rise, the movement becomes largely symbolic. The symbolic gesture of declaring a climate emergency is where many governments face criticism.

Motivations for Declaring Climate Emergencies.

Of the 47 municipalities that have declared climate emergencies, motivation is difficult to establish.

Nearly half (20 out of 47) municipalities referenced the United Nations International Panel on Climate Change (IPCC) reports on the necessity of climate change mitigation strategies. While reference points such as international data do provide some understanding of how the declarations are decided on, the 20 municipalities are not unified in any other measure; tier, population, and timing do not have an impact on whether or not the IPCC is referenced (see Appendix 1). Additionally, council meeting minutes do not indicate a consistent recommendation catalyst, with some municipalities relying on advisory committees, some on outside environmental organizations, some on councillors, and one municipality who voted to declare a climate emergency based on a deputation from a former chief planner (Municipality of Clarington 2020). The City of Kingston, Ontario’s first municipality to declare a climate emergency on 5 March 2019, was motivated by deputations from a professor and students from Queen’s University’s environmental studies program and the co-founders of the Kingston Climate Hub (City of Kingston 2019). The motivation is difficult to determine, however, based on the variety, declaration motivation may be

attributed to the increase in collective understanding throughout the world as residents, councillors, and non-government actors attempt to influence the governments they exist under.

Even in determining motivation for climate emergency declarations, municipalities such as the City of Guelph have actively refused to use the language of the climate emergency due to the often-perceived virtue signaling of the declaration. In May 2019, the City of Guelph Council met to discuss the City's 2050 renewable energy targets. The first amendment to this discussion sought to have Guelph "[acknowledge] the impacts of climate change and [join] citizens, cities and countries around the world in declaring a climate emergency" (City of Guelph 2019, 12). This first amendment was further amended with a narrowly carried rewording of "the City of Guelph acknowledges the impacts of climate change and joins citizens, cities and countries around the world in acknowledging a climate emergency" and further amended to read, "the City of Guelph acknowledges the impacts of climate change and joins citizens, cities and countries around the world in acknowledging a climate crisis" (13). Choosing to *acknowledge* a climate *crisis* rather than *declare* a climate *emergency* positions Guelph outside of the standard narrative but within the linguistic confines of climate change acceptance. Similarly, Prince Edward County motioned to amend the wording of their declaration to "climate urgency" rather than an emergency, however deputations from the public insisting on a more standardized wording resulted in the resolution, "To support other communities that have elected to 'name and frame' this global crisis by officially declaring a climate emergency" (Prince Edward County 2019, 12). The Region of Waterloo, as well, cited Guelph's language decision, however ultimately concluded that "utilizing the term emergency over crisis makes it part of the global movement and brings it as one voice and stands united with fellow municipalities" (Region of Waterloo 2019, 3). Waterloo also worked with a climate communications consultant (21) furthering the linguistic authority of the term "climate emergency" as both a tool of climate advocacy and public communication.

Lindsay (2010) argues that in liberal states, such as Canada, the climate emergency can be understood through the lens of general emergency governance. They note that the scope and allocation of power is altered in emergency situations, but also that “emergency government ... is a strategic condition of the state” (2010, 266). The strategic condition of climate emergency governance has not yet been established; that is to say, the strategy for the circumstance of a climate emergency is not complete at any level of government. The Ontario municipal strategy for climate emergencies currently is to normalize climate emergency declarations, expand the movement as Waterloo’s reasoning suggests, and follow with climate emergency actions. The climate emergency, when treated as an emergency and not a declaration, allows for policy planning and implementation (Lindsay 2010, 280). Lindsay further writes that “the evidentiary burden for abstention from emergency action” falls on those who do not accept the condition of the climate emergency and possibly on those who do not see policymaking value in emergency governance powers (274).

To declare a climate emergency as a municipality in Ontario is to both accept the reality of the climate crisis and join a global movement that aims to collectively act on mitigation and adaptation strategies. Municipal emergency powers are limited by the provincial government, however the conditions of emergency powers under a climate emergency declaration are unknown and therefore not subject to the same limitations. As municipalities move forward with gestures of international compliance, policy capacity will grow. Addressing climate change as an emergency results in urgency framing and requires an evaluation of the issue from an innovative perspective.

Policy Capacity Analysis and Measures

The legislative capacity for policymaking, however significant it may be, is one measure of many where emergency preparedness and management aptitude and power are concerned. For example, municipal policymaking capacity for economic development programs in Ontario’s Greater Golden Horseshoe region differ from the capacity to enact policy changes that would limit food waste from local grocery

stores or reduce the number of cars permitted to drive on municipal roadways. Formally, “capacity refers to the amount of professional and budgetary resources that are available to an entity to carry out a process, and the degree of sophistication with which the process is carried out” (Loh 2015, 134). Policy capacity requires even more than corporate resources, however, as the policy process also demands a constant operational commitment from council, staff and those impacted by the policy itself. The policy process is unlike that of a municipal procedure or project, to which Loh applies the definition of operational capacity quoted above. Rather, the process is ongoing with no clear conception or conclusion measures, as policies and policy solutions are conceived from problems, evaluations, solutions, and projections (Henstra 2010). This section proposes potential policy capacity measures based on how the climate emergency has been approached thus far, how municipalities have successfully maintained good governance, and how emergency policy has been enacted (see Table 2).

Table 2: Climate Emergency Policy Capacity Matrix

Climate Emergency Policy Capacity				
<i>Capacity Measures</i>	Community Advocacy Coalitions	Provincial/Federal Cooperation	Provincial/Federal Financing	Policy Venue and Agenda Coordination
<i>Theories of Capacity</i>				
Taylor (2016) Good Governance Theory		x	x	x
Comfort (2007) Crisis Management Theory	x	x		
Henstra and Thistlethwaite (2017) Risk Management Theory	x	x	x	
Labadie (2011) Adaptive Capacity Theory		x	x	

As proposed in Table 2, policy capacity measures align with four varied theories of municipal governance capacity, discussed in detail below. Though not comprehensive of climate emergency policy responses nor governance capacity theories, the Matrix provides a lens through which the policy examples in the proceeding section may be viewed. These measures differ from the theories to which they are compared, as they are not as theoretically exclusive. The four theories of capacity each offer their own measures of policy capacity to determine municipal capacity in areas of efficient flood risk management (such as with Henstra and Thistlethwaite [2017]) or emergency communication (such as with Comfort [2007]). The capacity measures listed above offer a broader scope of emergency capacity that relies on the individual specific measures presented by other emergency and governance theorists. Essentially, this matrix provides a foundation for the novel climate change policy network being developed through new climate emergency discussions and declarations.

Capacity Measures (x-axis)

Four probable measures of capacity are measured alongside four governance capacity theories varying in scope and theme. The measures of capacity are based on available data on effective climate change mitigation and adaptation action and include: a collective, community-driven effort to reduce the negative impacts of climate change, known as an Advocacy Coalition (Heinmiller and Pirak 2016); both multi-level government cooperation and financing; and a network of policy framing initiatives that place climate policy as a solution in multiple venues and agendas. As noted throughout this analysis, climate change mitigation and adaptation efforts are ineffective unless performed at a large scale, with broad commitment from leaders and followers (Gaddy, Clark and Ryan 2014). When reduced, Loh's definition of municipal operational capacity essentially refers to the willingness of government actors and leaders to dedicate resources to matters of significance. Based on the formality (and in some cases, contention) of climate emergency declarations, 47 of Ontario's municipalities, including the those with the largest populations such as Toronto, the Region of Peel, and Waterloo Region, are willing to dedicate knowledge, time, and financial resources to the climate change mitigation and adaptation policy process.

Where this analysis continues is with the four additional measures of capacity to supplement the baseline of operational will. The first measure, community support and advocacy, is derived from the notion that climate change solutions must be a collective effort. The Advocacy Coalition Framework as studied by Heinmiller and Pirak (2016), while in the context of land use policy, offers insight into how community support can effectively manifest government action and change. The authors write that advocacy coalitions are useful in policy situations involving “wicked problems”, which climate change mitigation and adaptation may be characterized as. The air of disagreement and/or distrust surrounding wicked problems allows community support to provide the political backing for policy decision (2016, 172). The study concludes that community support, when coordinated and collaborative in advocacy coalitions, represents a powerful voice in the policy process. Advocacy coalitions are defined as groups of “likeminded policy actors” capable of engaging in “substantive collective action” (169). Additionally, Henstra (2018) suggests “the range of feasible policy solutions available to municipal governments is influenced by pressure groups, such as neighbourhood associations, community service clubs and merchant’s associations” (127), further broadening the requirements for meaningful community impact on local policymaking. A recently formed community of policy actors, the signatories of the 2020 Declaration for Resilience in Canadian Cities, presents a clear example of a climate change action advocacy coalition as group of former and current government professionals who are committed to influencing planning and development policy in cities from an environmentally conscious perspective. Community advocacy and leadership is a democratic means of policy influence, reliant on elected and electing members of the public, and is therefore a necessary measure of climate change policy capacity.

The second and third measures each deal with intergovernmental relations. Multilevel cooperation and multilevel financing are divided in order to illustrate the difference between a collaborative, intergovernmental network of policy options and a network of financial support. They do, still, operate within a similar jurisdiction, as provinces and the federal government can play a pivotal role

in determining where and how municipalities may authorize discretion. Regarding the need for a cooperative and collaborative policy options network, municipalities are reliant on upper levels of government for their operational scope, as noted in the previous discussion of the *Municipal Act*. Although the scope is broadly defined and interpretable in order to give municipalities broad authority to govern as they see fit, intergovernmental cooperation provides a stronger basis for policy implementation with regard to matters of international significance such as the climate emergency. Political and environmental scientists such as Daniel Cohen (2020) argue for an interdisciplinary and intergovernmental approach to climate change mitigation and adaptation policy, going so far as to write that government policy at all levels “implicate[s] urban spaces in subtle and obvious ways” (60-61), therefore demanding an intersectional, collaborative approach from all levels of government (57). Rachael Krause (2011) writes that in the context of local policymaking for climate change action, “financial and technical capacity ... is a key determinant of ... policy decisions” (49). Krause objectively speaks to the necessity of intergovernmental financial cooperation, as the variation in municipal self-finance is wide. The smallest municipality (based on population size) that has declared a climate emergency in Ontario is the Town of Goderich with less than 10000 residents, while the largest municipality, the City of Toronto, is the largest city not only in Ontario, but in Canada with nearly three million residents (see Table 1). Available revenue from property taxes and user fees would thus be extremely varied (Henstra 2018, 123). For this reason, financial support from the federal government, such as assistance from the aforementioned Canada Infrastructure Bank, or the provincial government through grants or transfers is required. As well, the strong stipulations surrounding intergovernmental financial transfers (Juillet and Koji 2014, 53) requires collaboration in order to properly and ethically allocate government dollars.

While the previous three measures deal with the pre-policy conception process, the final measure of effective climate change policy capacity surrounds the framing of climate change mitigation

and adaptation policies. The introduction of climate emergency declarations to Ontario municipalities in March 2019 means the issue is relatively new to the municipal policy agenda, and therefore must be framed in a manner that demonstrates the necessity of policy initiatives without presenting the novelty as a barrier (Peters 2015, 76). Agenda-setting and venue-shopping are common terms in the policy process that refer to the act of having a solution be adopted as a policy on certain agendas and in certain venues in order to have the solution adopted forthright. As a measure of capacity, these terms are defined in a different manner. Climate change adaptation and mitigation does not have a single solution and is not a single-venue/-agenda issue; rather, climate change policy capacity must incorporate agenda and venue variances into its solutions. Essentially, if community support is a resource, and if intergovernmental cooperation and financing are resources, then the broad scope of climate change mitigation and adaptation is a resource. Climate change policies impact the policy networks of many municipal operations including development, tourism, housing, water/wastewater operations, and solid waste management (Carvalho 2018, 8). Similar to Kingdon's multiple streams analysis of policy development which assumes a congruence of problems, solutions, and political will is necessary to create policy (Béland and Howlett 2016), this capacity measure assumes the necessity of intragovernmental recognition of the climate emergency in order to create policy.

Capacity Theories (y-axis)

Some or all of the four measures described above are related or applicable to theories of municipal governance. Each theory proposes a set of competencies which the respective authors deem necessary for leadership. Comfort (2007), Labadie (2011), and Henstra and Thistlethwaite (2017) offer measures of governance capacity in the event of crises and emergencies, while Taylor (2016) offers a number of measures related to "good governance" in general. The theories are outlined in the following discussion and applied to the four capacity measures in the Climate Emergency Policy Matrix (Table 2) in order to justify the theoretical application and relevance of climate emergency capacity measures.

Taylor's 2016 article "Good Governance at the Local Level" defines common competencies of municipal governance and applies the elements of "good" quality governance structure to Canadian and Ontario governments. Taylor defines six dimensions and three supplemental determinants of "process quality", referring to the quality of policy making and subsequently the governance structure itself (2016, 6-8). The six dimensions include: "inclusivity, accountability, impartiality, administrative competence, learning capacity, and efficiency [or] timeliness" (6-7) and are generally measured by evaluating policy outcomes and service delivery efficiency, despite the undetermined utility of policy evaluation (26). The supplemental determinants are: "formal rules ... organizational norms ... and institutional capacity" (8). While understood as a single capacity measure for the purpose of this analysis, the difference between the dimensions and the determinants is that the six dimensions impact the development of policy, while the three determinants are impacted by the policy decision. The dimensions and determinants, however, represent a broad model of governance measurement for total process quality review.

This comprehensive governance evaluation model serves to assist municipalities in determining organizational productivity and utility as a measure of "good governance" (2016, 29). When compared with the properties of the climate emergency capacity measures, good governance concepts are necessary for intergovernmental cooperation and financing, as well as agenda/venue coordination. Taylor (2016) notes the significant "embeddedness" in the municipal policy process, as local governments are constitutionally linked to the financial whims of the province (14) and more broadly embedded in "multilevel governance arrangements (15) as a facet of their existence. Good governance relies on cooperation with other levels and bodies of government, and therefore also may be theoretically applied to climate emergency policy practice in the two cooperation-derived measures of capacity. As well, the dimensions and determinants of good governance focus on the policy process of high-quality governments. Part of this process, found in the dimensions and determinants, involves understanding when, where, and how a policy will thrive (7) and what must be social and political factors must be

accounted for throughout the process (8). Climate emergency policy must too account for a number of external circumstances, allowing the good governance theory to align with the fourth measure of climate emergency capacity.

Comfort's (2007) analysis of crisis management tactics posits that emergency response success is determined by four factors: cognition, communication, coordination, and control (189). The theory is founded on an acknowledgement of "the importance of both design and self-organizing action in guiding coordinated action" in the event of a crisis or emergency (195) as well as Comfort's notion that disaster management requires a collective coordination and adaptation (192). The community- and collaborative-driven approach to emergency management aligns the crisis management theory with the advocacy coalition and intergovernmental cooperation measures, as both are rooted in a collective response. In a similar vein of emergency management theory, Henstra and Thistlethwaite's (2017) risk management theory studies the response to floods and climate change-related disasters in Canada to promote a shared responsibility model of risk control. The authors suggest that, due to the inevitability of climate change-related emergencies, risks must be shared by the community and its governing bodies. The "burden of loss", the "responsibility for risk reduction", and the "costs of risk reduction" must be shared (28). Similar to Comfort (2007), Henstra and Thistlethwaite (2017) align with the advocacy coalition and intergovernmental cooperation measures, though they also align with the measure of intergovernmental financing as the explicit "costs of risk reduction" as well as the implicit funding for the "burden of loss" would require financial assistance (10). Finally, Labadie's (2011) adaptive capacity theory of emergency management is also specifically directed toward climate change mitigation and adaptation as it measures the response capability of a system to variations in climate by evaluating economic resources, the strength of government, infrastructure quality, and the strength of social protections (1253). Labadie's theory measures the response capacity of a system, such as a government, and therefore falls into the two intergovernmental capacity measures for climate emergency policy.

Due to the four capacity measures theorized in the previous section of this analysis being supported through some means by multiple existing governance capacity theories, the matrix of climate emergency capacity is therefore grounded in existing emergency management and governance literature. This analysis considers the ways in which the growing number of Ontario municipalities can use their limited authority to enact policy change through climate emergency declarations. Provided that a municipal government can measure its capacity through the lens of one of the four presented theories of governance, the municipality could assess the strength of their community support, intergovernmental support, and policy framing techniques in order to determine its climate emergency policymaking capacity. The following discussion presents a number of climate emergency policy examples from governments and advocacy groups that are supported by the four measures of climate emergency capacity.

Policy Examples

Based on a review of council meetings minutes from each Ontario municipality that declared a climate emergency between March 2019 and March 2020, common motivating factors include community support to join the global movement of local government climate emergency action, or support from council and environmental advisory committees regarding national and international reporting on climate change action (see Appendix 1). Additionally, Sara Hughes (2017) writes that cities are independently motivated to enact climate change policies due in part to the “unique set of capacities and political opportunities” for mitigation and adaptation tactics available to urban governments (2-3). As these reflect the character of the necessary capacity measures of climate emergency action, such as community advocacy and intergovernmental consensus support, the policy process for Ontario’s climate-conscious municipalities appears well-suited for upcoming policy solutions. While still novel and largely symbolic, the lack of capital commitment for policies directly tied to climate emergency declarations does not negate the social impact of the declarations (Henstra 2018). Direct municipal climate change mitigation and adaptation action from the 47 municipalities is not yet measurable in terms of policy success

evaluations; however, climate change policies do not require emergency declarations to be implemented, as demonstrated by the following examples of policy entrepreneurship.

American examples from large cities such as New York City's plaNYC and Boston's Greenovate Boston initiative are large-scale examples of municipal-community-state partnership that have led to policy solutions in green infrastructure development, environmentally-conscious zoning, solid waste reduction, and carbon emissions reduction (plaNYC 2011; Greenovate Boston 2020). Although these initiatives continue to grow in both acclaim and outcome success, the scale and structure of American metropolis governance is not easily replicated in Ontario. Rather, Ontario's municipalities benefit from a strong network of institutional advocacy through organizations such as AMO and the Federation of Canadian Municipalities (FCM). AMO has been a partner of municipalities throughout the 2010s regarding local climate change leadership. Although no advocacy has been documented since Ontario municipalities began declaring climate emergencies in March 2019, AMO has helped to establish provincial agreements and legislation on the municipal role in climate change policymaking, such as the *Climate Change and Low Carbon Economy Act, 2016* and Ontario's Climate Action Plan (AMO 2016; 2018). FCM continues to dedicate a substantial portfolio of resources to municipal climate action, as one of their defined focus areas. Programs such as the Green Municipal Fund, Municipalities for Climate Innovation, and Partners for Climate Protection connect Canadian municipalities with each other and with the advocacy efforts of FCM in order to strengthen the capacity and response of local government climate change policymaking (FCM 2020b).

With the exception of Toronto, the remaining 46 municipalities committed to climate change action do not possess comparable resources or infrastructure to engage in interdisciplinary policy action similar to New York City or Boston. However, although Hughes (2017) primarily studies the success of urban city climate initiatives, they also note the social, often immeasurable success of programs such as those provided by AMO and FCM, writing that collaborative and collective climate change mitigation and

adaptation policy is part of a “behavioural change with the city government” and requires programming for “increased resource allocation to climate change programs, increased inter-agency collaboration, and energy conservation in municipal activities” (11). The network provided by organizations like AMO and FCM strengthen the advocacy power of local government at the federal and provincial levels, yet the network also provides the opportunity for municipalities learn from one another. Although network theory in policymaking is negatively associated with a crowd of policy actors each looking to individually benefit from and contribute to policy design (Peters 2015, 89), the policy examples that have resulted from AMO and FCM networking place implementation responsibility with municipal actors rather than with the community (ICLEI 2020, 4; 8-9).

City-specific initiatives are not individually reported on by FCM and AMO’s latest documented climate advocacy action occurred in 2018, prior to Ontario’s municipal climate declarations being made. The number of emergency declarations in Ontario steadily increased in the year between the first declaration and the latest (Figure 1). However, following March 2020 municipal priorities have shifted from climate emergency management to pandemic emergency management. The shift in priorities is justified by the need for immediate resource allocation to public health. However, in the same way that climate emergency policy demands an interdisciplinary and collaborative approach, the pandemic response has proved that municipal operations cannot operate independent of one another. A recent and notable addition to the municipal climate change policy response is the 2020 Declaration for Resilience in Canadian Cities from former City of Toronto Chief Planner Jennifer Keesmaat. FCM and AMO provide, and have been providing, both capital and information resources for municipalities to address climate change before the impacts were considered emergencies; and, while the work of these municipal organizations has driven municipalities to program and policy success, the climate emergency demands a more innovative response. Similar to the novelty of climate emergency declaration, the 2020 Declaration proposes that the unprecedentedness of the events of 2020 allows municipalities to respond to climate

change and act on their declarations based on community momentum and the assumption that “a coordinated effort by the federal government, provinces, and cities ... can repair a half-century of unsustainable planning that has compromised our health, access to housing, the quality of our air and water, and the long-term financial viability of our cities” (Keesmaat 2020). The 2020 Declaration is supported by a number of local mayors and planners as well as many planning and environmental science professionals. This type of broad community advocacy combined with the demand for intergovernmental cooperation and a focus on framing the climate emergency as a subsequent challenge to COVID-19 presents municipalities with an opportunity to align their initial declarations with the proposed policy changes of the 2020 Declaration.

Policy solutions will vary for municipalities moving forward in assessing their role in climate action and their capacity for policy action. The climate emergency is, for Ontario municipalities, a policy opportunity. From a governance and policymaking perspective, solutions require more than simply a problem to solve—policy solutions are made possible by political will, operational means, and contextualization by policymakers that rationalizes “a preferred interpretation of social reality...for policy intervention” (Juillet and Koji 2014, 43). The growing popularity of climate emergency declarations proves the will exists and the FCM and AMO have continuously provided resources for operational means. Climate Emergencies at the municipal level are shrouded by doubt of meaningful action due to the constitutional nature of local government. This analysis, however, outlines the legislative context and re-framing opportunity for climate change policy to develop and be implemented through an emergency framework.

Conclusion

The climate emergency will only grow in urgency and gravity moving forward, making it the defining international issue of the 21st century (Foster 2020). Each national, provincial, regional, and municipal government in the world will have to consider the effect climate change and natural disasters will have on

the people they govern. Planning for the impact of a climate emergency is not an issue of left-leaning or democratic governments. Policy intended to help communities mitigate and adapt to increased flood seasons, wildfires, droughts, food shortages, and infrastructure damage is an issue of governments that have developed the capacity to respond to the emergency. Thomas Beamish (2020) defines climate change as a “crescive” problem and in the “genre” of pandemic catastrophe, consistent with “the human tendency to avoid dealing with problems ... until they manifest as acute traumas” (217). The psychology of climate change acceptance is widely studied and not included in this analysis, yet the consideration for the delayed emergency response should be given to governments who have demonstrated their capacity.

The purpose of this analysis is to determine the policymaking ability of municipalities in Ontario and how the municipalities that have recently declared climate change can move forward within the policymaking network available to local governments. By reviewing the legislative context of policymaking initially, the normative albeit limited municipal policy system is established as a malleable option through which municipalities may move forward with policymaking. More conclusively, the policy capacity matrix represents both the theoretical aspect of municipal emergency governance alongside possible measures of capacity. Municipalities may rely on previously established theories of governing in order to determine capacity, or conversely may rely on known capacity measures to determine gaps in policy capacity that can be filled through theoretical study.

Although currently halted while municipalities address COVID-19 and financial issues, the steady growth in the number of municipalities declaring climate change between the first and most recent suggests that as local governments become more accustomed to the current emergency, they will continue with addressing the future emergency. Further research and evaluation of municipal climate emergency declarations will have the resources to focus on the content of related policies and action directly related to the declarations once the policy process is realized in implemented actions.

Additionally, climate emergency declaration analysis in Ontario may move beyond the municipal level if

the climate emergency is considered by the Provincial legislature as a threatening emergency comparable to those experienced in 2020. Emergency governance has traditionally been an afterthought of many governments, however, just as municipalities have made policymaking normative in the face of ambiguity, ongoing uncertainty may push governments to consider emergency strategies in a more consistent and normalized manner as emergencies too become more consistent.

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Appendices

Appendix 1: Municipal Council Meeting Minutes Review

Municipality	Link to Council Minutes re: Decision to Declare Climate Emergency	Reference IPCC	Meeting Minutes reference COUNCIL in decision making	Meeting Minutes reference RESIDENTS in decision making	Meeting Minutes reference ADVISORY COMMITTEE in decision making	Meeting Minutes reference OUTSIDE ORG in decision making
Amherstburg, Town of	https://calendar.amherstburg.ca/council/Detail/2019-11-12-1800-TUESDAY-Regular-Council-Meeting/f1ba1ede-b48c-4c0c-8d54-abb500ebcdb4	Y	Y	N	Y	N
Barrie, City of	http://barrie.legistar.com/MeetingDetail.aspx?ID=724130&GUID=CFA269AF-AB79-4E54-98AC-0222585175F2&Options=info &Search=	Y	Y	N	N	N
Brampton, City of	https://www.brampton.ca/EN/City-Hall/meetings-agendas/City%20Council%202010/20190605cmn.pdf	N	N	Y	N	N
Brant, County of	http://brant.siretechnologies.com/sirepub/mtgviewer.aspx?meetid=2138&doctype=MINUTES	Y	Y	N	N	N

Brantford, City of	https://pub-brantford.escribemeetings.com/Meeting.aspx?Id=3a4ad93b-1245-4f88-89b2-949ccdd4f3b4&Agenda=Agenda&lang=English	Y	Y	N	N	N
Burlington, City of	https://burlingtonpublishing.escribemeetings.com/Meeting.aspx?Id=048f07c7-e14c-4da7-8ddc-85ee2ee48e86&Agenda=PostMinutes&lang=English	Y	Y	N	N	N
Caledon, Town of	https://pub-caledon.escribemeetings.com/Meeting.aspx?Id=69d87750-8626-4c48-87a1-0877c35bd099&Agenda=Merged&lang=English	N	N	N	N	Y
Central Elgin, Municipality of	https://centralelgin.civicweb.net/document/93238	N	Y	N	N	N
Chatham-Kent, Municipality of	https://www.chatham-kent.ca/Council/Meetings/2019/Documents/July/July-15-17b.pdf	Y	Y	N	N	N
Clarington, Municipality of	https://pub-clarington.escribemeetings.com/FileStream.aspx?DocumentId=4308	N	N	Y	N	N

<u>Cobourg, Town of</u>	<u>https://cobourg.civicweb.net/document/179824/Motion%20Re%20Climate%20Emergency%20Declaration.pdf?handle=EC2A688377B941538F4CB08138952326</u>	N	Y	N	N	N
<u>Durham, Regional Municipality of</u>	<u>https://calendar.durham.ca/default/Detail/2020-01-29-0930-Regional-Council-Meeting/456f443a-0b1b-4d2b-aaef-ab5e010614eb</u>	N	N	Y	N	N
<u>Goderich, Town of</u>	<u>https://pub-goderich.escribemeetings.com/Meeting.aspx?Id=5d36cd2f-4c90-4c5c-8260-6456ce73dbad&Agenda=Agenda&lang=English&Item=74</u>	N	N	N	Y	N
<u>Greater Sudbury, City of</u>	<u>https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&lang=en&id=1323#agendaitem16976</u>	Y	Y	N	N	N
<u>Halton Hills, Town of</u>	<u>https://hub.haltonhills.ca/Media%20Notices/2019-05-06%20Climate%20Change%20Resolution.pdf</u>	N	Y	N	N	N

Halton, Regional Municipality of	https://edmweb.halton.ca/OnBaseAgendaOnlineiframe/Documents/ViewDocument/REGULAR MEETING OF REGIONAL COUNCIL 16-19 2590 Minutes 2019-09-11 9 30 00 AM.pdf?meetingId=2590&documentType=Minutes&itemId=undefined&publishId=undefined&isSection=false	Y	Y	N	N	N
Hamilton, City of	https://pub-hamilton.escribemeetings.com/FileStream.aspx?DocumentId=187035	Y	Y	N	N	N
Kenora, City of	http://listview.kenora.ca/Files/Meeting%20Documents/2019/Council%20(including%20special)/September%2017%20Council%20Minutes.pdf#navpanes=0&view=FitH	Y	N	N	Y	N
King, Township of	https://king.civicweb.net/filepro/documents/?preview=72041	Y	Y	N	N	N
Kingston, City of	https://www.cityofkingston.ca/documents/10180/32824678/City-Council Meeting-10-2019 Agenda March-5-2019.pdf/146d1496-69d0-41d8-b1a9-fa0850bea387	N	N	Y	N	Y
Kitchener, City of	http://kitchener.ca.granicus.com/MetaViewer.php?view_id=2&event_id=567&meta_id=64081	N	Y	Y	N	N

London, City of	https://www.london.ca/residents/Environment/Climate-Change/Pages/Climate-Emergency-Declaration.aspx	Y	Y	N	N	N
Meaford, Municipality of	https://meaford.civicweb.net/document/85500	Y	Y	N	N	N
Milton, Town of	https://calendar.milton.ca/meetings/Detail/2019-07-22-1900-Council-Meeting/0e9e598c-b67c-4951-9fdb-ab5001338b82	Y	N	Y	N	Y
Mississauga, City of	https://www7.mississauga.ca/documents/committees/council/2019/2016_06_19_Council_Agenda.pdf	N	N	Y	N	N
Newmarket, Town of	https://pub-newmarket.escribemeetings.com/FileStream.ashx?DocumentId=19031	Y	Y	N	N	N
Niagara-on-the-Lake, Town of	https://domino.notl.com/sites/notl/NOTLCOTW.nsf/BF5BF13826D2CAA28525783E006E878E/6997E4E488D9B58185258515005008C4	N	Y	N	N	N
Oakville, Town of	https://securepwa.oakville.ca/sirepub/mtgviewer.aspx?meetid=3658&doctype=AGENDA	N	N	N	N	Y
Ottawa, City of	https://app05.ottawa.ca/sirepub/cache/2/r1t hit1xrn3uwzfknbivupdt/58148807032020081151516.PDF	Y	N	N	Y	N

Peel, Regional Municipality of	https://www.peelregion.ca/council/agendas/2019/2019-10-24-rc-agenda.pdf	Y	Y	N	N	N
Peterborough, City of	https://pub-peterborough.escribemeetings.com/Meeting.aspx?id=e8940b85-3a25-48da-9989-1cb2d9df98b8&Agenda=Agenda&lang=English&Item=31	N				
Pickering, City of	https://corporate.pickering.ca/WebLink/0/edoc/220444/December%2016,%202019.pdf	Y	N	N	N	Y
Prince Edward, County of	https://princeedwardcounty.civicweb.net/filepro/documents/162577?preview=177114	N	N	Y	N	N
Sarnia, City of	https://sarnia.civicweb.net/document/122889	N	Y	N	N	N
St. Catharines, City of	https://stcatharines.civicweb.net/filepro/documents/63201?preview=67225	N	N	Y	N	N
St. Thomas, City of	https://www.stthomas.ca/common/pages/DisplayFile.aspx?itemId=16527540	N	N	Y	N	N
Stratford, City of	https://calendar.stratford.ca/default/Detail/2020-02-10-1900-Regular-Council/b87c731a-98e0-442c-8268-ab7500de6087	N	N	Y	N	N

Tecumseh, Town of	https://www.tecumseh.ca/en/living-here/resources/Images/NR---Council-Highlights-December-10-2019-FINAL.pdf	N	Y	N	N	N
Thunder Bay, City of	https://www.thunderbay.ca/en/city-hall/resources/Documents/Mayor-and-Council/Notification-for-web---COW---Jan-13.pdf	N	N	N	Y	N
Toronto, City of	http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.MM10.3	N	Y	N	N	N
Vaughan, City of	https://pub-vaughan.escrimemeetings.com/FileStream.aspx?DocumentId=16690	N	N	Y	N	N
Waterloo, Regional Municipality of	https://calendar.regionofwaterloo.ca/Council/Detail/2019-10-09-1900-Council/ec7b468f-0cf5-4f78-aad9-aaef010233e8	Y	Y	Y	N	Y
West Nipissing, Municipality of	http://www.westnipissing.ca/images/docs/MayorsCouncilandCommittees/councilmeetings/2019/Apr-23-2019%20-%20REGULAR%20Minutes%203.pdf	N	Y	N	N	N
Whitby, Town of	https://whitby.civicweb.net/document/127602	N	N	N	Y	N
Wilmot, Township of	https://calendar.wilmot.ca/budget/Detail/2019-09-23-1900-Council-Meeting2/25ab7b9b-149a-4d42-9aaf-aacc010bd9aa	N	Y	N	N	N

<u>Windsor, City of</u>	https://www.citywindsor.ca/cityhall/City-Council-Meetings/Council%20Minutes/Documents/2019/November%2018,%202019%20City%20Council%20-%20Minutes.pdf	Y	N	Y	N	N
<u>Woolwich, Township of</u>	http://calendar.woolwich.ca/council/Detail/2019-09-24-1900-Committee-of-the-Whole/84f7a9e4-948c-40d8-b9a0-aae000a6db5b	N	Y	N	N	N