Barriers to Growth Management: Local Challenges Implementing the Growth Plan for the Greater Golden Horseshoe

by

L. Michelle Lee

A thesis
presented to the University of Waterloo
in fulfilment of the
thesis requirement for the degree of
Doctor of Philosophy
in
Planning

Waterloo, Ontario, Canada, 2018 © L. Michelle Lee 2018

Examining Committee Membership

The following served on the Examining Committee for this thesis. The decision of the Examining Committee is by majority vote.

External Examiner Name: Dr. Andre Sorensen

Title: Professor

Supervisor(s) Name: Dr. Pierre Filion (PLAN)

Title: Professor

Internal Member Name: Dr. Robert Gibson (SERS/PLAN)

Title: Professor

Internal Member Name: Dr. Mark Winfield (Adjunct PLAN)

Title: Professor

Internal-external Member: Name: Dr. Kevin Hanna (Adjunct GEM)

Title: Associate Professor

Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

To combat urban sprawl and its negative effects on ecosystem services and human health, regional growth management and containment policies have been used with increased frequency to manage urban growth. Yet, local implementation of regional growth management planning policies across North America has had mixed success, often resulting in a mismatch between growth management planning objectives and the urban development reality. This research explores the reasons for the apparent mismatch by examining how barriers to local implementation are expressed, reinforced and perpetuated to prevent transformative change.

Using Ontario's Growth Plan for the Greater Golden Horseshoe as a case study, the dissertation examines the barriers to implementation through a review of local contextual information and the perspectives of those tasked with implementing the Plan within three case study regions of the Greater Golden Horseshoe: Waterloo, Simcoe and Peterborough. A relational model of barriers reported in the literature is developed and tested against the barriers described by local planners, developers, the media, planning documents, and locally relevant academic literature and used to frame comparisons across case studies. Variations among the case studies are interpreted in light of the model using a conceptual framework that conceives barriers as institutions embedded within a hierarchical culture of planning.

Case study results reveal that barriers to local implementation vary across regions. This variation can be attributed to particular local contextual pressures and differences in local planning environments that influence how broader, societal barriers are understood, justified, managed and reinforced. Planning environments in the more rural and exurban case studies regions of Simcoe and Peterborough demonstrated similar belief systems, values and planning goals that obstructed local efforts to manage growth. These same regions faced particular growth and economic pressures that reinforced existing value systems and reduced the range of perceived planning solutions and approaches to growth management. In contrast, planning environments in the more urban Waterloo case study region, as well as urban single tier municipalities within the rural case study regions, demonstrated planning environments that were more open to innovative and assertive planning approaches to manage growth.

This research demonstrates how the interactions between local context and planning environments shape the interpretation and implementation of regional growth management plans. The research findings provide focal points for further research on growth management implementation by highlighting barriers and patterns of reinforcement that are less visible and rarely acknowledged in planning practice. As well, this research highlights the need for planning approaches that recognize the important role of the local planning environments in advancing growth management objectives. Failure to

recognize and address the underlying barriers and their interdependencies may result in the development of regional growth management plans that fail to achieve their objectives.

Acknowledgements

I thank my advisor, Pierre Filion, who helped guide me through the development and completion of this research and Kent Håkull who contributed a significant amount of time and energy to assist with the survey work. Thanks also to my committee members Bob Gibson, Mark Winfield, and Kevin Hanna, and my external examiner, André Sorensen, whose input helped to improve this thesis. A Social Sciences and Humanities Research Council scholarship helped make this research possible. Finally, a warm and heartfelt thanks to my family, Mike Elliott, Quin Elliott and Mercer Elliott for their ongoing patience and support.

Table of Contents

Examining Committee Membership	ii
Author's Declaration	iii
Abstract	iv
Acknowledgements	vi
List of Figures	xi
List of Tables	xii
List of Boxes	xiii
Chapter 1. Introduction	1
Thesis Organization	4
Chapter 2. Barriers to Implementing Growth Management Strategies	6
Barriers to Growth Management in the Literature	10
Artifacts	11
Planning Environment	19
Societal Environment	28
Conclusion and Emerging Questions	34
Chapter 3. Theoretical and Conceptual Frameworks	36
New Institutionalism	39
Three Variants of New Institutionalism	40
Power and Agency	42
Local Context	43
Stability and Reproduction	43
Innovation and Change	46
Planning Culture	47
A Culturalized Model of Planning	48
Synthesizing New Institutionalism and Planning Culture: A Conceptual Framework	52
Modeling Key Barriers	62

Artifacts	69
Planning Environment.	70
Societal Environment	72
Applying the Models	74
Chapter 4. Methods	76
Research Objectives	76
Comparative models	77
Case study selection	77
Interviews	80
Interview candidates	80
Documents	81
Interview and Document Analysis	84
Conceptions of Implementation	86
Terminology	87
Growth Management vs. Growth Control	87
Descriptive Statistics and Background Data	88
Data Reliability, Validity and Study Limitations	88
Triangulation	91
Chapter 5. Planning Context for Municipal Implementation of Growth Management	92
Municipal Responsibilities	92
Municipal Finance	93
Urban Planning and Development	94
Smart Growth: Growth as an Uncontested Objective	94
Ontario's Growth Plan for the Greater Golden Horseshoe	97
Chapter 6. Case Study Results	105
Waterloo	105
Regional Municipality of Waterloo Growth Management Initiatives	108

Kitchener, Waterloo and Cambridge Growth Management Initiatives	112
Township Growth Management Initiatives	113
Barriers to Growth Management in the Waterloo Region	114
Model of Barriers to Growth Management for Waterloo	117
Summary	127
Simcoe	128
Simcoe County growth management initiatives	131
Lower tier municipalities' growth management initiatives	136
City of Barrie Growth Management Initiatives	141
Barriers to Growth Management in Simcoe	142
Model of Barriers to Growth Management for Simcoe	146
Summary	163
Peterborough	164
City of Peterborough's Growth Management Initiatives	167
County of Peterborough's Growth Management Initiatives	169
Lower tier municipal growth management initiatives	171
Barriers to Growth Management in Peterborough	173
Model of Barriers to Growth Management for Peterborough	176
Summary	189
Comparison of Models	189
Chapter 7. Institutionalized Barriers to Growth Management Planning Approaches in the	Greater
Golden Horseshoe	194
Key Themes across Case Study Regions	194
Planning in Rural Regions: the Role of Place Identity and Urban Governance	195
Planners as Market Actors: Land and Property Markets and Urban Governance	200
Patterns of Stability and Change	204
At the Tipping Point: Growth Management in Waterloo	204

Market-led Planning in Simcoe	207
Managing No-growth in Peterborough	212
Local Context and Plan Implementation	214
Summary	217
Chapter 8. Conclusion	218
Key findings	219
The importance of Local Context	219
The Role of Place Identity, Land and Property Markets and Urban Governance	221
Local Planning to address Regional Objectives	223
Implications for Theory	225
Areas for Further Research	229
References	232
Appendix A. Standardized Interview Questions	277
Appendix B. Planning Documents, Media Accounts and Academic Literature Reporting B	Barriers
to Growth Plan Implementation	280
Appendix C. Reporting Frequency	286

List of Figures

Figure 1. Culturalized Model of Planning
Figure 2. Modified Culturalized Planning Model
Figure 3. Culturalized Planning Model of Barriers to Growth Management
Figure 4. Detailed Barriers to Growth Management Implementation and Predicated Reinforcing Inter- relationships
Figure 5. Municipalities within the Greater Golden Horseshoe Growth Plan Area
Figure 6. Negotiated Settlement between Region of Waterloo and Appellants Showing Lands Proposed for Urban Expansion
Figure 7. Waterloo Case Study Area: Model of Key Barriers to Growth Plan Implementation116
Figure 8. Simcoe Case Study Area: Model of Key Barriers to Growth Plan Implementation
Figure 9. Peterborough case study region: Model of key barriers to Growth Plan Implementation 175

List of Tables

Table 1. Comparison of planning culture and new institutional frameworks
Table 2. Causal Mechanisms for Institutional Stability and Reproduction
Table 3. Factors Promoting Institutional Change
Table 4. Barriers to Implementation of Regional Growth Management Plans
Table 5. Characteristics of Case Study Areas
Table 6. Case Study Areas and Associated Lower and Single Tier Municipalities
Table 7. Breakdown of Interview Participants
Table 8. Number and Breakdown of Documents Reporting Barriers to Growth Plan Implementation 83
Table 9. Forecasted Population and Employment for Upper- and Single-Tier Municipalities within the Greater Golden Horseshoe to 2041 (in 1000s)
Table 10. Population and Employment Allocations for Inner and Outer Ring Regions of the Greater Golden Horseshoe
Table 11. Distribution of Population across Municipalities, Waterloo Region
Table 12. Waterloo Case Study Area: Key Barriers to Growth Plan Implementation
Table 13. Distribution of Population across Municipalities, Simcoe Case Study Area
Table 14. Simcoe Case Study Area: Key Barriers to Growth Plan Implementation
Table 15. Alternative Greenfield Density and Intensification Targets
Table 16. Distribution of Population across Municipalities, Peterborough Case Study Area165
Table 17. Intensification Targets of Lower Tier Municipalities, County of Peterborough
Table 18. Peterborough Case Study Area: Key Barriers to Growth Plan Implementation
Table 19. Growth Management Barriers in Waterloo
Table 20. Growth Management Barriers in Simcoe
Table 21. Growth Management Barriers in Peterborough

List of Boxes

Box 1. Regional Growth Management Strategy Objectives	108
Box 2. City of Kitchener Growth Management Strategy Goals	112
Box 3. County of Simcoe 1998 Official Plan Objectives	131
Box 4. City of Peterborough Growth Plan OPA, 2009	168

Chapter 1. Introduction

Since the mid 20th century, North American urban development has been oriented around the automobile. The low density, peripheral growth that characterizes urban development in many North American cities is credited with causing, directly or indirectly, a suite of social, environmental and economic problems including increased risk of obesity (Lopez, 2004), reduced sense of place and social connection (Putnam, 2000), greater air pollution (Dodman, 2009), higher energy consumption (Ewing & Rong, 2008; Norman, MacLean, & Kennedy, 2006), loss of farmland and habitat (Radeloff, Hammer, & Stewart, 2005), and decreased productivity associated with traffic congestion (Hymel, 2009; Sweet, 2011).

The solutions proposed to address the trend of low density urban growth emphasize improved planning policies and urban design through the application of growth management approaches. In North America, a number of state and provincial governments have adopted regional growth management plans and policies to encourage more compact, centralized development. Yet in spite of efforts to better manage growth through regional-scale planning, many cities continue to expand at the expense of their commercial centres and growth of low density, single use development shows little sign of abating (Ewing, Pendall, & Chen, 2002). The prevalence of the car-oriented urban form, despite the focus of decades of concerted planning efforts, has led many planners and scholars to question the reason for the disparity between plans and the development reality (Filion, 2010).

This research explores the reasons for the apparent mismatch between growth management planning goals and urban development. Recognizing that regional growth management strategies are implemented by local municipalities, variability in local implementation is the focus of this study. Using Ontario's Growth Plan for the Greater Golden Horseshoe as a case study, the barriers to implementation are examined through a review of local contextual information and the perspectives of those tasked with implementing the Plan within three case study regions of the Greater Golden Horseshoe: Waterloo, Simcoe and Peterborough. In considering the full range of barriers operating at multiple scales and their interdependencies, this research aims to answer the questions:

- 1) What are the key barriers to local implementation of regional growth management plans?
- 2) Are barriers archetypical or are they unique to the local context?
- 3) How do the barriers to implementation relate to one another, and what are the mediating mechanisms that define these relationships?

4) How do the barriers interact to reinforce the status quo? Where are there opportunities for change to overcome the barriers?

Four main data sources are drawn upon to identify barriers to implementation: 1) a multidisciplinary literature review to identify barriers demonstrated or theorized to impact or inhibit implementation of regional growth management plans; 2) interviews with actors responsible for implementing the Growth Plan to gain insights from their practical experiences, with emphasis on municipal planners, but also including provincial planners, planning consultants and developers in the case study municipalities; 3) municipal and provincial planning documents, correspondence, media, reports and academic studies that examine planning issues in the specific case study regions to identify local challenges, opportunities and areas of contention regarding Growth Plan implementation; and, 4) Statistics Canada community profile data (2011) and background municipal planning documents to obtain descriptive statistics and contextual information for each case study region.

To capture the complex interrelationships and characteristics of obstacles to growth management, this research applies a new institutional conceptual framework that conceives implementation barriers as part of a broader institutional system comprised of interrelated and contextually embedded factors. A second conceptual framework that interprets the barriers to implementation as a product of planning culture is used to categorize and synthesize barriers. Using the two frameworks as a conceptual basis, a relational model of barriers reported in the literature is developed and tested against the barriers described by local planners, developers, the media, planning documents and academic research, and used to frame comparisons across case studies. Variation between case studies is interpreted through key institutional themes that highlight how the local planning environment and contextual factors interact to reinforce and perpetuate barriers to growth management.

This research builds on previous studies of plan implementation by synthesizing and testing barriers reported in the literature against real world conditions, and by integrating two conceptual frameworks – new institutionalism and planning culture – to advance our understanding of how barriers to implementation are influenced by local context. Results of this research contribute to the broader field of plan implementation by deepening our understanding of the relationship between local context, planning culture and plan implementation. It does this by examining how obstacles to the implementation of a growth management plan are perceived, justified and reinforced through local planning cultures, planning policies and processes. It highlights the importance of local context on the interpretation, management and expression of broader scale, societal barriers.

An understanding of the role and influence of local context and different planning cultures on implementation can assist regional planners in developing better, more implementable and supported policies, and improved methods to communicate those policies. As well, the articulation of the interrelationships between barriers and how they are embedded in or reinforced by local planning cultures can help local implementing agencies recognize and address obstacles to implementation.

Thesis Organization

This dissertation is organized into eight chapters. Following the introductory chapter, the second chapter explores the policy and plan implementation literature to identify known and theorized barriers to local implementation of growth management plans. The barriers identified in the literature are organized into three interrelated and hierarchical groups: 1) societal environment, 2) planning environment, and 3) artifacts. Interrelationships between the identified barriers and the mechanisms by which they are theorized or demonstrated to be reproduced or undermined are described.

These frameworks – new institutionalism and a theory of planning culture – are combined to form a conceptual model of barriers to implementation based on the barriers identified from the literature cited in the previous chapter. The model identifies the set of expected barriers against which the barriers reported in the case studies are tested, with particular reference to the interdependencies and reinforcing mechanisms between barriers. The conceptual model highlights three clusters of barriers that form the broader institutional context that enables or constrains implementation.

Chapter 4 introduces the research questions: What are the barriers to local implementation of regional growth management policies? Are barriers archetypical or are they unique to the local context? How do the barriers to implementation relate to one another, and what are the mediating mechanisms that define these relationships? How do barriers interact to reinforce the status quo? Where are there opportunities for change? To answer these questions, an exploratory, case study methodology is used that draws on interviews with municipal planners and developers, media reports, planning documents and academic literature. Case studies were selected using a purposeful, maximum variation (heterogeneity) approach to capture similarities, central themes and shared patterns of policy implementation among the disparate regions as well as to capture distinct policy implementation challenges that are unique to each region.

Chapter 5 presents information about the formal institutional context for growth management planning in Ontario, including the legislative authority for land use and infrastructure planning, the respective roles of the Province and local municipalities, the economic context, and the detailed requirements of the Growth Plan for the Greater Golden Horseshoe. This chapter sets the context within which local municipalities from each case study region must plan for growth.

The sixth chapter presents the local social, economic and political context for each study region and the barriers to implementation of the Growth Plan as reported by municipal planners, developers, the

media, planning documents and relevant academic research. Key barriers for each case study region are described and compared to the predictive model of barriers. Regional barrier models are developed for each case study region to illustrate how local conditions varied from the model.

Chapter 7 interprets the variability across case study regions. Framed by new institutionalism and a theory of planning culture, two themes are described that dominate the discourse around implementation of growth management policies in the case study regions. The chapter identifies patterns of stability and change in the barriers identified for each municipality and contrasts the results against barriers predicted by the plan implementation literature.

The final chapter, Chapter 8, summarizes the research findings and identifies key findings. The chapter concludes with a discussion of the implications of the research findings on theory and opportunities for further research.

Chapter 2. Barriers to Implementing Growth Management Strategies

To combat urban sprawl and its negative effects on ecosystem services and human health, regional growth management and containment policies have been used with increased frequency to manage urban development (Bengston, Fletcher, & Nelson, 2004). In recent years, the Province of Ontario enacted growth management planning legislation called the Places to Grow Act (2005) followed by the adoption of a Growth Plan (2006) to guide urban growth and development for its most populous and fastest growing region, the Greater Golden Horseshoe. As a regional plan, the Growth Plan aims to make more efficient use of land and infrastructure and to protect farmland and natural areas from development. To do this, the Growth Plan requires local municipalities to focus development in existing and emerging built up areas rather than in greenfield areas and to plan for transit-supportive, mixed use, and complete communities (Ontario Ministry of Public Infrastructure Renewal (MPIR), 2006). The Plan has been commended by the planning community as an innovative model of new-regionalism planning (American Planners Association (APA), 2007; Ontario Ministry of Energy and Infrastructure (MEI), 2007).

Despite accolades from the planning profession, the capacity of regional growth management plans like the Growth Plan to foster the development of compact, mixed use communities and to reduce urban sprawl is not well understood (Carruthers, 2002a; T. Moore & Nelson, 1994; Paulsen, 2013). Scholars have noted that despite a plethora of land use plans that set out policy guidelines for more compact development, low density car-oriented development continues to prevail and cities continue to expand at the expense of their commercial centres (Ewing, Pendall, & Chen, 2002; Filion, Bunting, Pavlic, & Langlois, 2010). Once established, the structural components of cities such as buildings, street patterns and land uses become deeply entrenched and demonstrate considerable persistence in the face of pressures to change (Conzen, 2004; Hommels, 2005a; Hommels, 2005b).

Unsuccessful past attempts to plan at the regional scale in the Greater Golden Horseshoe and elsewhere suggest the need for a better understanding of why some plans fail to achieve their objectives (Ben-Zadok, 2009; Boarnet, McLaughlin, & Carruthers, 2011; White, 2007). In a review of previous regional plans for the Toronto-centred region, for example, White (2007, p. 49) concluded that "the Growth Plan itself may be worthy of praise, but this history has shown quite clearly that impressive plans can quite easily become unimplemented plans – in which case their impressiveness ceases to be of much use". Studies of US state growth management plans have similarly received mixed reviews. A number of investigations of state growth management plans have failed to establish a statistically significant relationship between the presence of growth management policies and urban sprawl (Anthony, 2004),

while others have found the connection between growth management plans and metrics of urban sprawl across the different states to be equivocal (Carruthers, 2002b; Ingram, Carbonell, Hong, & and Flint, 2009; T. Moore & Nelson, 1994; Pendall, 1999).

Variability in the effectiveness of regional growth management plans or programs can be attributed in part to the range of policies and regulations that comprise each unique growth management planning framework (Ingram et al., 2009). Analyses of individual growth management programs have connected successful planning outcomes to efforts to fine tune growth management policies and supporting regulatory controls (Ben-Zadok, 2005). Comparative policy and plan evaluation have been useful in identifying basic components that contribute to stronger and more effective plans. Many of these components, including requiring municipal official plan conformity to the state or regional growth management planning framework, and the integration of land use and infrastructure planning, were deliberately incorporated into the Growth Plan for the Greater Golden Horseshoe (Brad Graham, personal communication). For these and other reasons, including the Plan's research-based, progressive content, and the transferable nature of its components and methodology to other regions, the Growth Plan was awarded the American Planning Association's prestigious Daniel Burnham Award to recognize its contribution to community welfare and the advancement of the planning profession (Ontario Ministry of Infrastructure (MEI), 2006).

While differences in the policies that comprise a regional policy framework can provide some explanation for different planning outcomes, they fail to account for local variability in conformance to growth management plans. Like many state growth management plans in the US, the Growth Plan for the Greater Golden Horseshoe is structured to permit a significant degree of local autonomy in implementation, giving municipalities the flexibility to adopt those policies and programs they feel best fit their priorities and local conditions. Municipal autonomy has been touted as a requirement to prevent local resistance to regional planning mandates (Fishman, 2000); however it leaves growth management objectives vulnerable to derailment by local political, economic and social actors and circumstances. As a result, some scholars have concluded that it is primarily the local scale at which barriers to implementation seem to arise (Carruthers, 2002a; O'Connell, 2009). Local scale barriers to implementation, such as political structure, land market characteristics, municipal subsidies for sprawling infrastructure, demographics and geographic characteristics have all been shown to affect efficacy of regional growth management plans (Blais, 2010; Brody, Carrasco, & Highfield, 2006; Carruthers, 2002b; Lubell, Feiock, & Ramirez de la Cruz, Edgar E., 2009; Tomalty & Skaburskis, 2003). Municipalities have been found to define the growth management term 'smart growth' differently, and may implement only a small subset of smart growth principles (Ye, Mandpe, & Meyer, 2005), or pay only lip service to growth

management concepts without translating them into action (Downs, 2005; Ingram et al., 2009; Ye et al., 2005). Planners' perceptions and the approaches they use to implement plans may also influence a plan's implementation (e.g. Berke et al., 2006).

Local implementation can be understood as a culturally-embedded practice (Othengrafen, 2010). Municipal planning agencies operate within a broader social, political and economic framework that can constrain local growth management policy adoption and implementation efforts. National and subnational economic fluctuations, political ideologies and policies have been demonstrated to structure the environment within which local planning agencies adopt and implement policies to manage growth (Basmajian, 2013; Counsell, Haughton, & Allmendinger, 2014; Frenkel & Orenstein, 2012; Sager, 2011). Outward development pressures on cities posed by entrenched cultural tendencies, such as auto dependency and racial or socioeconomic discrimination, are additional forces that can conflict with growth management planning agendas (Wassmer, 2008).

Understanding the challenges encountered or created by local municipalities when implementing a regionally-prescribed growth management plan is critical for the development and implementation of effective, executable plans. As one author concluded after a comparison of state growth management plans, "it does little good to enact policies that are too complicated, time-consuming and/or expensive to enforce" (Carruthers, 2002b, p. 1978). Without evaluating the factors that hinder or enhance local implementation, planners are at risk of falling into a pattern of "new plan syndrome", whereby plans are repeatedly updated without attention to whether or not the original plan was actually implemented (Calkins, 1979; Talen, 1996). For example, an understanding of the redistributive effects of growth management policies and the vested interests of social groups can help planners and elected officials make better plans and manage public and political opposition (Downs, 2005). Learning about the barriers to specific policies can help planners identify areas where plans will be difficult to execute (Berke & Godschalk, 2009) and where additional, mutually-supportive policies may be needed to achieve the desired effects (Bengston et al., 2004).

Although the importance of evaluating how and if plans are implemented has been widely acknowledged for some time, the body of research on plan implementation has grown little since Calkins' (1979, p. 745) warning four decades ago that "the current state of the art of planmaking and supporting analysis is based on minimal data inputs and, what is probably more important, insufficient feedback on the efficacy of plans or policies during their implementation". More recently, scholars have declared that the study of plan implementation has been "ignored for decades" in the field of planning research (Berke et al., 2006, p. 581) – a deficiency that has undermined the legitimacy of planning as a profession to its

critics (Talen, 1996). Understanding plan implementation has been further hindered by the complexity of factors that influence the development process and spatial outcomes. Studies of plan implementation have historically focused on either macro- or micro-level processes that obstruct implementation, with only limited integration or synthesis between the two scales (O'Toole, 2000). Methodologies that emphasize mainstream economic perspectives in which actors are viewed as rational, utility maximizers, have provided incomplete explanations for the complex and interconnected processes that underlie urban development and plan implementation (Adams & Tiesdell, 2010; Guy & Henneberry, 2000; Healey & Barrett, 1990). Urban policy studies that examine only formal political arrangements, such as laws and government structures, have been criticized for providing an "undersocialized" explanation of implementation in their assumption that policies and their outcomes are simply an aggregation of individual preferences (Lowndes & Roberts, 2013). Responding to these and other methodological and conceptual shortcomings, a growing body of literature recognizes that local practices are "historically and geographically situated" and are contingent on both formal and informal socio-political arrangements involving multiple scales (González & Healey, 2005, p.2056; Verma, 2007).

This research seeks to fill the gap in our understanding of local variability in growth management implementation. The Growth Plan for the Greater Golden Horseshoe, recognized as a model of progressive and coordinated growth management planning with transferrable methodology, principles and policies, serves as a case study for the investigation of local variability in implementation (American Planners Association (APA), 2007). The research explores the formal and informal socio-cultural, political and economic institutions that frame the local contexts and create constraints on the local implementation of a regional growth management plan. In addition, it examines the role that actors and actor groups play within these framing institutions to reinforce or challenge the status quo. The research adopts a conceptual framework that recognizes that constraints or barriers to implementation do not operate in isolation – they interact in ways that can lead to further entrenchment or opportunities for change. By investigating the obstacles to local implementation of a high quality plan such as the Growth Plan, this research aims to highlight a broader range of obstacles that might otherwise be attributed to a poorly designed plan.

This chapter explores the plan and policy implementation literature to identify the known and theorized factors that challenge or obstruct local implementation of regional growth management plans. The literature review focuses on barriers to implementation in recognition of the mismatch between the prevailing low density development outcomes and the near paradigmatic status of growth management as a desirable planning objective and widespread inclusion of general growth management principles within planning documents (Downs, 2005). The review draws on literatures across multiple disciplines that

examine how policies and plans are carried out at the local level, including urban planning, municipal finance, policy implementation, and governance. Geographical regions sharing similar political and planning institutions, such as North America, Europe, Australia, New Zealand and Japan, were the focus of the literature review, but other examples from Asia, Africa and South America were also examined. The chapter examines reported barriers to growth management that emerge from formal governance, political and economic and spatial structures that shape local plan implementation, such as planning law, the practices of provincial and local planning agencies, citizen groups, land and property markets, and physical geography. As well, it examines less visible, taken-for-granted barriers that influence implementation, such as the distribution of power and resources, the unwritten rules and conventions of municipal governments and their planning departments, the motivations and practices of development industry actors, and local community values, identities and interests. Recognizing that actors and the structural frames within which they express their preferences and interest do not operate in isolation, the review examines how barriers interact in "mutually constitutive and generative processes" (Healey, 2007).

Chapter 3 introduces two theoretical frameworks: new institutionalism and a theory of planning culture. The two theories are integrated to form a conceptual framework to model expected barriers to growth management, as identified in the literature review, and their synergistic or conflicting relationships. The model highlights the scale of influence at which key barriers operate and the mechanisms by which they are reinforced or vulnerable to change. The model is used later in the thesis to frame comparisons across local municipalities within the Greater Golden Horseshoe.

Barriers to Growth Management in the Literature

Provided that supporting social, political and economic processes and frameworks remain in place, the structural components of a city can be highly resistant to change long after they have been deemed undesirable. Cities and the practice of planning for urban growth are rife with examples, particularly with respect to the failure to meet growth management objectives; low density, single use developments continue to occur in communities guided by Official Plans that encourage compact, mixed use urban forms; investments in public transit fail to induce new development at transit supportive densities; and "edge cities" continue to grow, despite significant investments in inner city redevelopment (Filion & McSpurren, 2007; Filion, 2010b). On the other hand, some regions have successfully challenged the post-war, car-oriented development trajectory with effective growth management strategies, successful transit initiatives, and reduced rates of urban expansion (Gosnell, Kline, Chrostek, & Duncan, 2011; P. M. Hess & Sorensen, 2015). Of interest to many scholars is the question of why some regions have achieved a certain degree of success with respect to managing growth while others appear to

be "locked in" to a particular development trajectory and unable to change (Downs, 2005; Grant, 2009; Searle & Filion, 2011).

The subsequent section summarizes barriers that have been identified in the literature to obstruct growth management implementation. To facilitate later systematic analysis, barriers to growth management are organized according to the scale at which they operate using a typology developed by Othengrafen (2010). The typology recognizes a broad range of social, cultural and economic factors that affect planning practice, including those factors that are more tangible and visible as well those that are less visible or taken-for-granted. Used by Othengrafen (2010) and colleagues (Knieling & Othengrafen, 2015; Othengrafen & Reimer, 2013) to explore the political, economic, and socio-cultural reasons for variability in planning practices across different European regions, the typology lends itself to analyses that examine the interactions and fit between barriers at different scales that may lead to opportunities for their de-stabilization and change. It categorizes factors that structure planning practice into three different scales of influence: micro-level (artifact), meso-level (planning environment) and macro-level (societal environment). The artifact scale is the smallest sphere of influence and includes structures or products of the planning process, such as urban form, land use plans and zoning regulations. Artifacts are the outputs of the broader planning environment, which is comprised of the established assumptions, philosophies and practices of planners, planning agencies and other implementing actors. The planning environment, in turn, is nested within a societal environment, which includes the underlying assumptions and perceptions that guide values and action.

Artifacts

Artifacts are the tangible and visible products, structures and processes of the planning environment and can include urban design and form as well as the plans, policies and regulations that guide decision making. In part because of their visibility, planning artifacts are the focus of most research on plan implementation. Planning artifacts that have been found to serve as barriers to implementation include local, provincial and federal plans, policies and investments and their consistency with each other, as well as the physical or built environment in which plans are implemented.

Local Municipal Planning and Policies

Municipal governments play a significant role in the implementation of growth management plans through their adoption of local conforming plans and the steering of private development and public works to conform to those plans. The Official Plan is the primary policy tool a municipality can use to redistribute growth to existing built up areas. Scholars have theorized that the quality of such plans can affect their ability to influence land use outcomes. Strong plans are defined generally as those plans that

clearly articulate values and goals, have a factual basis, provide a clear relationship between analysis and policies, provide opportunity for public participation, and establish responsibilities for implementation, monitoring, and evaluation. Such plans are theorized to be more likely to yield outcomes consistent with the plan (Baer, 1997; Berke & Godschalk, 2009). Weak plans, on the other hand, can provide too little guidance for land use, leaving implementation to the discretion, biases and political motivations of those implementing the policy (Baer, 1997; Berke & Conroy, 2000).

Empirical studies of the relationship between plan quality and land use outcomes have been few and the outcomes mixed (Brody & Highfield, 2005). Brody and Highfield (2005) found that the presence of specific implementation approaches in local plans in Florida (e.g. sanctions for non-conformance and a requirement for monitoring) was significantly correlated with land use conformity. Berke et al. (2006) found that the quality of plans in New Zealand was positively associated with conforming land use outcomes, although other factors such as enforcement style, awareness building and staff capacity were also positively correlated. In contrast, Norton (2005b) and Steelman and Hess (2009) both found that land use outcomes in North Carolina were unrelated to plan quality and were instead a function of the stakeholders involved with the implementation of the plan and their relationships with each other.

In some cases, municipal policies and regulatory tools can serve as barriers to developers seeking to build urban forms that are consistent with growth management objectives. Such plans and their supporting policies and programs may discourage developers from redeveloping infill sites or building more compact urban forms by creating financial or technical barriers. In a survey of US developers, local regulations were identified as the greatest obstacle to their participation in the development of more compact, transit-oriented urban forms (Levine & Inam, 2004). Developers in Toronto have similarly pointed to municipal regulations, including parking requirements, inflexible planning restrictions and engineering standards, as significant barriers to their efforts to build compact infill communities (Blais, 2003). Attracting developers to infill sites as opposed to greenfield sites can also be challenging when there is an absence of municipal incentives to offset the costs of deteriorating or under capacity infrastructure, zoning that is unsupportive of new uses or densities, and environmental contamination (Farris, 2001).

Certain municipal policies that frustrate growth management efforts have received in depth study. In the US, zoning has long been recognized as a potential regulatory obstruction to compact development (Talen, 2013). Although zoning can be used as a tool to support higher densities and mixed uses, its critics argue that it can also be used to protect or promote low density and single use development and prevent the development of mixed and more compact forms (Talen, 2013). In a review of the effects of

zoning practices on urban sprawl in the United States, Talen (2013) and Levine (2006) both argued that zoning has led to an inefficient patterning of development by "locking in" land uses to low densities that cannot easily shift to higher densities when conditions change. This inefficiency creates a condition in which households willing to settle for higher density, compact housing in exchange for a more desirable location are excluded from the market (Levine & Inam, 2004; Levine, 2006). Empirical studies support the assertion that restrictive low density, single use zoning can obstruct growth management efforts. In a study of US state growth management initiatives, Kim and colleagues (2013) found that density increases in counties with restrictive zoning were related to decreased vacancy rates rather than a result of higher density infill development. As well, zoning regulations that are intended to achieve different land use planning goals such as groundwater recharge (Sung, Yi, & Li, 2013) and slowing urban growth (Pendall, 1999) have been demonstrated to restrict intensification of urban areas.

Municipal fiscal policies have also received considerable attention for their role as a barrier to growth management. Blais (2010) and others (Skaburskis & Tomalty, 2000; Slack, 2002; Tomalty & Skaburskis, 1997) have argued that the traditional way in which Canadian municipalities are financed creates subsidies for low density development at the urban fringe at the expense of the inner city. These scholars have demonstrated how higher costs for infill development are transferred to the developer and ultimately passed on to the consumer. The means by which fiscal policies subsidize developers and consumers of development at the urban fringe is through development charges. Development charges, which are levied by municipalities to cover the initial infrastructure costs of a new development, are typically calculated using an average cost pricing method, rather than estimating actual costs. For infrastructure such as roads, water and sewage, costs increase with the increase in linear footage. Average cost pricing creates a cross-subsidy whereby high density development is overcharged and low density development is undercharged (Blais, 2010; Tomalty & Skaburskis, 1997). Infrastructure maintenance costs, which are not included in development charges and therefore must be covered by municipal taxes, are higher per unit for low density development, thus exacerbating the mismatch between the real costs and price of low density development. For example, developments such as low density retail and drivethrus, that necessarily generate more car trips than other types of development due to their use and design, place a higher demand on road infrastructure than other uses. Average cost pricing for development charges that do not take into account the type of development and its long term infrastructure usage, therefore creates a subsidy for those forms of development at the expense of other more efficient urban forms.

Similar arguments have been applied to other municipal financial tools, such as property taxes, which can inadvertently subsidize property on the urban periphery and overcharge inner city properties

(Blais, 2010). Since property tax is calculated based on the market value of a property rather than the real costs associated with infrastructure provision and usage, residential and commercial properties located on lower cost land at the urban periphery are generally charged less in property tax than development located on more expensive properties at the city's core. This relationship is exacerbated by the presence of a fragmented municipal government, since peripheral suburban municipalities that offer fewer services can charge lower property taxes than central cities (Song & Zenou, 2009). According to the Chair of the Canadian Brownfields Network, property taxes for brownfields, which are typically higher than taxes for greenfield development because of their centralized location, are a significant barrier to redevelopment (Prior, 2010). Harris and Lehman (2001) found that residents in downtown Hamilton tended to pay higher taxes than their suburban counterparts and that the method by which property tax was calculated in Hamilton discriminated against the owners of lower priced, more compact housing, most of which was concentrated in the city centre. Owners of lower priced inner city housing could be expected to pay up to 20% more property tax than an equivalent home in the suburbs, leading Harris and Lehman (2001, p. 898) to declare that "multiplied many thousandfold, and given the geographical concentration of cheap housing, it amounts to an enormous drain on the resources that are available to property owners in central neighbourhoods".

Perverse subsidies that favour suburbanization, may be easier to change if they cannot be justified through prevailing belief systems, they are inefficient in achieving objectives, and there is the presence of a credible alternative (Filion, 2010b). Gradual geographic redistribution of property tax rates and development charges may face less political opposition in part due to the general lack of understanding of how such tax rates are determined and what they support. In California, for example, Innes and Booher (Innes & Booher, 1999, p. 143) argue that although municipal finance contributes significantly to the urban form, "State and local tax and revenue structures and program responsibilities are interwoven so thoroughly that most people have little understanding of which tax goes where and which government is responsible for which service." Compared with more entrenched policies such as zoning, a number of municipalities in Canada including the Cities of Ottawa and Kitchener, have already revised their development charge policies to help reduce the unintended consequences of average cost pricing (Blais, 2010).

Municipal policies such as zoning and segregation of land uses are highly entrenched in planning practice due to their reinforcement by supporting processes, regulations and advocacy groups. Low density, single use zoning is popular with home owners because it provides them with security on their investment and control over the aesthetics of their neighbourhood (Fischel, 2004; Levine, 2006). It does this by buffering homeowners from undesired land uses and inhabitants, such as apartment buildings,

industry, people of different races and income levels, and land use conflicts, such as increased traffic, noise and visual blight (Dennis, 2000; Fischel, 2004). Zone changes required to increase density or permit new or mixed uses can involve a lengthy public consultation process with a community of property owners who generally perceive the original zoning as a positive feature and have little desire for change.

Federal and Provincial Policies

Growth management is influenced by federal and provincial policies that shape the broader legal, fiscal and administrative contexts within which cities operate. Some of these policies, including federal housing and transportation policies, have served as transition points for the suburbanization of urban growth. Others, such as local revenue reliance, help to reinforce conventional municipal policies and limit horizontal consistency. These policy frameworks, many of which are entrenched in relatively rigid constitutional arrangements and law, can constrain local municipalities' capacity to limit urban sprawl by establishing competing objectives for municipalities and creating disincentives for compact growth.

Local Revenue Reliance

Beyond transfers from upper levels of government, municipal governments in Canada and the US rely exclusively on local revenue such as property taxes, development charges, and user fees to fund municipal services. In Canada in 2008, for example, 58% of municipal services were funded by municipal revenues, 54% of which was generated from local property taxes (Statistics Canada, 2009). A number of scholars have identified the limited powers of municipal governments to generate revenues to pay for local services as a constraint to growth management. A product of the statutory relationship between provinces or states and their subordinate municipalities, the limited capacity of municipalities to generate revenue places significant political and economic strain on municipal land use decision making. The visible, redistributive effects of property taxes make it an unpopular tool for generating revenue. Property taxes have been blamed for the flight of urban residents to suburban and exurban areas with lower taxes (Harris and Lehman, 2001), creating an incentive for municipalities to maintain low property taxes.

Since different types of development generate different levels of tax revenue and put different pressures on municipal services, municipalities are incented to maximize their net revenue by seeking land uses that will produce the greatest amount of tax revenue while utilizing the fewest services. Influence of a land use's revenue potential in municipal land use planning decisions has been termed "the fiscalization of land use" (Wassmer, 2002) and creates a strong motivation for municipalities to encourage types of development that can bring in the greatest net gain in revenue. The effect is compounded when combined with distorted municipal taxation policies that favour low density development. Revenue

maximization as a primary planning goal can create competition between municipalities for development and can interfere with regional scale goals such as the encouragement of compact development.

Theoretical models have demonstrated that municipal reliance on property taxes can cause a reduction in the intensity of land development and an associated decrease in population density, leading to a more sprawling city (Brueckner & Kim, 2003; Skaburskis & Tomalty, 2000; Song & Zenou, 2006). Land use fiscalization effects may induce municipalities to favour single family homes over higher multifamily homes or apartments because of their higher tax revenue potential and lower draw on municipal services by higher income residents. The financial conditions created by property taxes can make it more economical for developers to delay higher density development (Skaburskis & Tomalty, 2000). As well, the prospect of increasing property tax revenue and employment may incent municipalities to create an oversupply of industrial land in suburban and older areas of the city (Skaburskis & Tomalty, 2000).

Empirical evidence of land use fiscalization effects was first noted in California, where researchers found that local revenue reliance created a strong incentive for planners to discourage low tax revenue developments such as residential and affordable housing developments, which place a high demand on tax-funded community facilities. Instead planners are encouraged to support high revenue developments such as big box retail centres, which draw consumers away from the commercial cores of cities to peripheral locations, and leads to urban decline in the central cores and further residential and commercial dispersion (Innes & Booher, 1999). In a study of the Greater Toronto area, Skaburkis and Tomalty (2000) found that while municipal officials did not acknowledge the influence of fiscalization effects, they reported a preference for higher revenue and job creating commercial and industrial development projects over lower revenue residential development.

Transportation Investments

Historic and current federal and provincial investments in car-oriented transportation also create a challenge for municipalities in their efforts to manage urban growth. The relationship between car travel and urban form was foreseen by Lewis Mumford, who as early as 1923, predicted that car travel would lead to the decentralization of urban centres. In discussing highway development, Mumford lamented that "in such a network, no single centre will, like the metropolis of old, become the focal point of all regional advantages; on the contrary, the "whole region" becomes open for settlement" (2003, p. 95). As predicted, road and highway development, along with subsequent widening and improvements provided increased access to new areas for development, which in turn has contributed to a decentralized and multi-nodal urban form throughout North America (Cervero, 2003; Handy, 2005). Commercial and manufacturing industries, adapting to the availability of truck transportation, have increasingly located in suburban areas

and along highway corridors, with new suburban communities emerging to support these industries (Muller, 2004). Empirical studies have confirmed this land use transportation relationship. In a review of the empirical literature, Boarnet (2011) found that peripheral employment development increased with Interstate highway development. Baum-Snow (2007) found that the construction of a single highway through a US central city district could be empirically linked to an 18% decrease in central city population.

Some scholars argue that the magnitude of government spending on road construction in North America fueled a scale of suburban expansion that would otherwise not have been possible (Kuklick, 1980; Newman & Kenworthy, 2000). In the US, investment in highway construction under the Federal Highway Act of 1916 and the Interstate Highway Act of 1956 culminated in the construction of almost 70,000km of Interstate highways (Kuklick, 1980; Mohl & Rose, 2012). In Canada, a smaller but not insignificant commitment by the Federal government was made for highway construction through the Canada Highway Act (1919) and the TransCanada Highway Act (1949) (Turgeon & Vaillancourt, 2002). The Toronto Region, in particular, witnessed 216 km of new highway by the late 1960s (Filion, 2010a). These investments were matched in many communities by a disinvestment in infrastructure conducive to denser urban forms, such as public transit (Muller, 2004).

Disproportionate investment in car transportation infrastructure continues to challenge efforts to manage urban growth. Proponents of public transportation systems argue that federal governments in countries with large areas and lower population densities such as Canada and the US, tend to invest more heavily on highway and road infrastructure than on public transportation (Canadian Urban Transit Association, 2011). Investment by Ontario's Provincial government, for example, has emphasized road infrastructure despite plans since the 1970s that put a greater emphasis on public transportation (Filion, 2000). In the Toronto area, difficult economic times in the late 1980s and early 1990s were reflected in significant cuts to public transit, while the construction of a new Highway 407 proceeded (Filion, 2000).

Housing Policy

The Canadian Federal government's involvement with mortgage lending and other fiscal policies of Canada's national housing agency, the Canada Mortgage and Housing Corporation (CMHC), have had a significant influence on the context within which municipalities plan for urban development. Initially intended to simulate the economy and job creation, early Federal housing policies such as the Dominion Housing Act of 1935, the National Housing Act of 1944 and the creation of the CMHC in 1945 provided financial incentives to encourage homeownership (Goldberg & Mark, 1985). These incentives included direct lending to home buyers, mortgage insurance to reduce risk to private lenders and increase the

availability of private mortgages, exclusion of housing sales from a capital gains tax, the development of a Registered Home Ownership Savings Plans, and Canadian Home Ownership Stimulation Program (Hulchanski, 1986; Sewell, 1994). Because the objective was to stimulate job creation in the construction industry, the incentives were targeted at new housing construction on the urban periphery rather than the reinvestment in urban areas.

The Veteran's Land Act (VLA) of 1942 also served to encourage home construction on the suburban fringe. The VLA provided homes and small land holdings for returning veterans by subsidizing the placement of over 100,000 households on existing agricultural lands, of which approximately 87% were small suburban acreages (Harris & Shulist, 2001). The Act, according to Harris and Shulist (2001, p. 258) reflected antiurban sentiments prevalent at the time: "Repelled by the urban, industrial way of life, they framed legislation to encourage employed veterans to discover the virtues of rural living". In its original design and intent, the Act actively discouraged any intensification of Canadian cities.

Although the Dominion Housing Act, the National Housing Act, and the Veteran's Land Act are now defunct, they served to tip the balance away from city living toward suburban homeownership (Ekers, Hamel, & Keil, 2012; Hulchanski, 2006). In both Canada and the US, Federal subsidies established a trajectory of suburban development that competes with more recent inner city reinvestment efforts. In an effort to quantify the impact of US Federal housing policies, Persky and Kurban (2003) estimate the policies to have generated a 20% increase in suburban development.

In addition to directly subsidizing the construction of new homes on the urban periphery, the "property bias" of Federal housing policies helped establish a culture of housing consumption and a strong coalition property owners who share a protectionist view of their homes and neighbourhoods (Harris, 2009; Jacobs & Paulsen, 2009). Referred to as NIMBY (Not-In-My-Backyard), public efforts to constrain certain types of development represent a significant and entrenched barrier to local efforts to encourage urban intensification and infill development. Protection by housing consumers of the value of their investment has been described by some scholars as a primary factor that reinforces continuity in urban policy (Sorensen, 2011a). The self-perpetuating nature of property rights advocacy are described in more detail in the section *Property Rights Advocacy and NIMBY*.

Built environment

Existing land use patterns can constrain growth management efforts by limiting options for infill development. The development of high density infill requires the assembly of multiple properties, but the diversity and fragmentation of ownership can make this land assembly difficult and expensive (Buitelaar

& Segeren, 2011; Farris, 2001). Property owner "holdout', caused by owner expectations of high levels of compensation, or refusal to sell property because of its symbolic value, can make intensification and redevelopment projects financially or technically unfeasible (Buitelaar & Segeren, 2011; Cadigan, Schmitt, Shupp, & Swope, 2011). Redevelopment efforts can be further challenged by opposition to infill by property owner advocacy groups concerned about changes to their physical environment (Adams, Disberry, Hutchison, & Munjoma, 2002). For many infill projects, existing infrastructure such as roads, water, sewage, parking and underground cable, may require upgrade to meet municipal standards or market demand (Farris, 2001). Areas available for residential infill may lack market appeal due to the absence of supporting services and amenities such as access to grocery stores and commercial districts (Farris, 2001).

Land use patterns also influence and are influenced by transportation choices, creating a positive feedback loop that favours the persistence of existing low density land uses and supporting car-oriented transportation infrastructure (Handy, 2005). Parking lots to support car travel require a significant amount of space that could otherwise be used for higher density uses. US studies have found parking lots to comprise from 5% of the total urban footprint to as much as 16% (Akbari, Rose, & Taha, 2003; Davis, Pijanowski, Robinson, & Kidwell, 2010; Davis, Pijanowski, Robinson, & Engel, 2010). Once constructed, highways and roads are politically challenging to repurpose for higher density uses, even if underutilized or in conflict with other planning objectives (Dolnick, 2012).

Other scholars have found the physical design of the built form can limit options for their transformation and intensification. Bervoets and Heynen (2013) found that the purpose-built design and layout of post war single family homes made their adaptive reuse for multifamily dwellings difficult and expensive. Retrofitting single family homes to multifamily homes also can require substantial alterations to meet the thermal and acoustic standards (Bervoets & Heynen, 2013).

Planning Environment

Othengrafen (2010) conceives planning artifacts as being influenced by the underlying planning approaches, motivations, norms and behaviours of municipal implementing agencies. Municipal agencies or "administrators" face a unique set of institutional pressures compared with private sector organizations, in part due to the fact that they "operate in strong institutional and weak technical environments because they face greater demands for legitimacy, than for efficiency and efficacy" (Fernández-Alles & Llamas-Sánchez, 2008). Within these political, administrative and social structures, municipal planners are thought to operate within a "bounded rationality" which can limit the scope, content, processes and capacity of local planning (Friedmann, 1967). While municipalities are not uniform in their set of

practices and procedures, many share the political motivation to develop solutions that appease local interest groups and attract development.

The planning environment frames and justifies the decisions of planners and planning agencies that translate into policy and action. Embedded in a societal environment, the planning environment includes the beliefs, traditions and political, administrative, economic and organizational structures that can confine decision making and influence planning outputs, or artifacts (Knieling & Othengrafen, 2015; Othengrafen & Reimer, 2013). In addition to planners, this frame includes other actors that are recognized participants in the planning and development process, such as politicians, developers, and other stakeholders involved with plan implementation. The normative and cognitive beliefs of actors responsible for implementing policies as well as the relative value and role of various stakeholders in the planning process set the context within which growth management policies are developed, including its goals, rationale, and the methods by which it is to be implemented (P. A. Hall, 1993; Skogstad, 2008).

Policy makers and the public at large are often unconscious of their own underlying assumptions and beliefs, making the modification of those beliefs difficult (Skogstad, 2008). Changes to values, beliefs and practices can be actively resisted by those who continue to benefit from the status quo (Pierson, 2000; Skogstad, 2008). The policy and planning implementation literature has identified three key barriers within the planning environment that may constrain or facilitate the implementation of plans.

Characteristics of the implementing agency and "street-level bureaucrats"

Under the planning frameworks imposed by local, provincial/state and federal agencies, municipalities have considerable discretion in how they adopt and implement policies to encourage compact growth and discourage sprawl. Literature in the field of public policy implementation has long associated this discretion with the outcomes of public policy (M. J. Hill & Hupe, 2009; Lipsky, 2010). In a review of public policy implementation studies, O'Toole (2000) noted that a common finding was the importance of factors that underlie the decision making and behaviours of those actors who implement policy. O'Toole concluded "...it seems clear that research performed in ignorance of the understanding that implementation actors themselves have about their circumstances is likely to miss important parts of the explanation for what happens" (2000, p. 269).

Policy implementation theorists have identified a number of factors that influence the decisions and actions of implementing actors. These include: 1) the signals from politicians and managerial staff that support or undermine the policy, 2) the organizational and managerial structures and processes that

enhance or constrain the implementing staff's discretion and capacity to act, and 3) the knowledge and beliefs of the implementing staff (M. J. Hill & Hupe, 2009; H. C. Hill, 2003; May & Winter, 2009).

Signals from politicians and managerial staff

Signals from politicians have been explored in the context of political will, measured as the adoption by municipal councils of growth management policies and adherence to these policies in decision making. Political will, in turn, has been found to be related to levels of civic engagement and pressure and lobbying from different advocacy groups, including environmental groups, development industries, and property rights groups (Moroney, 2008; O'Connell, 2008; O'Connell, 2009; Ramirez de la Cruz, E., 2009). O'Connell (2009) found that communities with a greater number and range of growth management-supportive advocacy groups adopted more growth management policies, while Ramirez de la Cruz (2009) found that communities with stronger presence of development industry activism were less likely to adopt certain growth management policies such as growth boundaries, than other communities. Others have found the influence of public advocacy on political will is tempered by elected officials' beliefs and commitment to planning principles (Norton, 2005a).

Earlier studies in policy implementation literature emphasized the importance of managerial oversight to reduce discretion by implementing actors. Edwards (1984) and Sabatier and Mazmanian (1979) for example, proposed the importance of greater hierarchical control, supervision, performance measures, sanctions and incentives to reduce discretion that led to non-conformance. More recently, May and Winter (2009) also found that strong signals from managerial staff in the form of a high degree of supervision and emphasis on compliance were associated with greater adherence to an employment policy by implementing staff. In settings where implementation involved coordination with multiple agencies, O'Toole (1986) found that managerial leadership was important as a means to establish support and trust and to leverage resources.

Organizational and managerial structures and processes

Other scholars have focused on organizational processes that can enhance participation in and legitimacy of policy making as a means to manage discretion. Planning processes such as collaborative planning, have been examined as a more "bottom up" approach to plan implementation. Collaborative planning approaches that account for the competing interests of stakeholders may achieve more successful outcomes, since mutually agreed upon goals are more likely to be implemented (Innés & Booher, 1999). Collaborative planning within an implementing agency has been found to increase that agency's commitment to a policy. For example, in studying the relationship between planners'

commitment and outcomes, Waldner (2009) found that a disconnect between the department responsible for creating a plan and the department charged with enforcing the plan led to failures in implementation. Proponents of collaborative planning argue that collaborative processes can help planning agencies transition from embedded practices to new approaches (Burby, 2003; Healey, 2003). Studies of the influence of collaborative planning on plan implementation have focused on the types and quality of collaboration involved in the creation and implementation of a plan (Day, Gunton, & Albert, 2003; Joseph, Gunton, & Day, 2008; Margerum, 2002; Oliveira & Pinho, 2010; Oliveira & Pinho, 2011). Outcomes of this research suggest that the collaborative process is an important, but not exclusive, condition for implementation success (Day et al., 2003; Joseph et al., 2008).

Certain characteristics of the municipal administrative planning process have been shown to impact the outcome of local growth management efforts. In a review of US state growth management programs, Bengston (2004, p. 281) identified administration efficiency as a critical factor in the local implementation of growth management plans, citing that "poorly administered growth management efforts often frustrate desirable development and make a community unattractive for developers. The result may be development leapfrogging to distant communities at higher environmental and social costs, exactly the opposite of what growth management seeks to achieve". Both Bengston (2004) and Nelson (1996) identified streamlined permitting for development, nondiscretionary standards for approving development permits, and rational review of urban expansion as important contributing factors in the effective implementation of growth management policies.

Planning capacity can also play a role in implementation, by mitigating the influences of advocacy groups on elected officials. Hawkins (2014) found an interactive effect between divergent viewpoints of advocacy groups and the presence of planning staff, where communities with planning staff adopted a greater number of growth management policies despite negative pressures from advocacy groups, than those without planning staff. Berke et al. (2006) and Laurian et al. (2004a) found that planning capacity was but one of a number of characteristics that affect land use outcomes of local plans. In an examination of the development approvals process, they found that development application quality, planners' use of a strong enforcement style, planning department awareness-building with developers and a higher staff capacity were significantly and positively related to the consistency of planners' decisions with local policy. Planning capacity, defined as the community's financial capacity to plan, on the other hand, was found by Burby (2005) to have limited impact on a plan's use in decision making.

Knowledge and beliefs of implementing staff

Local planning staff can act as gatekeepers for the types of policies that are incorporated into planning documents. Implementation challenges can arise where local planners do not support state or provincial growth management mandates. For example, Ali (2014) found that counties in Maryland and Virginia failed to incorporate into local plans policies for growth management that were not statemandated or were not perceived to meet local needs and priorities. Maryland cities and towns with more and better trained planning staff have been found to be more likely to adopt policies to manage urban growth (Ali, 2016). Edwards and Haines (2007) attributed lower growth management policy adoption rates by rural municipalities in Wisconsin to the fact that the municipal staff did not perceive the policies as relevant to their town's particular economic needs or urban form. An Ontario study of how new urbanist developments were adopted in different cities similarly found that the concept failed in communities in which municipal planners and engineers did not subscribe to the underlying compact village concept and resisted unfamiliar design and development standards (S. Moore, 2010). Others have found that planners' commitment to the certain planning objectives can lead to higher quality, more implementable plans (Lyles, Berke, & Smith, 2014; Norton, 2005a)

Obstacles can also arise at the point where local planners translate locally adopted policies into their daily practices. Scholars have found that a planner's commitment to a plan's objectives can be an important factor that influences how rigidly they conform to policy during the development approvals process (Dalton & Burby, 1994; Stevens, 2010). Conformity to policies in the development approvals process has also been attributed to experience and training of staff, including their familiarity with the development process, and their awareness of guiding policies and regulations (Stevens, 2010).

Growth management implementation may also be impacted by the way in which a planner views his/her role in the market. Since development is primarily constructed and financed by the private sector, market forces can have a significant, often limiting, influence on the achievement of planning objectives (Jones, 2014). Although most planners tend to occupy a hybrid role between private and public interests (S. Moore, 2012), planners who see themselves as active agents in property markets may be more effective than those who view their role as detached from the market (Adams & Tiesdell, 2010). In a case study of two new urbanist communities, Moore (2012, p. 591) attributed successful implementation of a new urbanist community in Markham to the fact that it was "created, promoted and implemented through a process very much micro-managed by the public sector". Failure in implementation of a new urbanist community in Orangeville was ascribed to those planners' reactive rather than proactive response to the market.

Characteristics of the Development Industry

The development industry plays a particularly important role in the implementation of growth management objectives, since cities are built as a direct result of the activities of private sector realtors, investors, developers and builders, who purchase and assemble land, as well as design, construct, market and sell buildings to consumers (Coiacetto, 2000). The development industry is typically characterized as groups of organizations or individuals who are motivated to maximize profit by seeking opportunities to generate high development revenues with low development costs (Adams, 2008). Given these motivations, developers are described as fundamentally concerned with the availability of an adequate supply of developable land, and are considered to be resistant to planning policies that place restrictions on the types or locations of development (Pacione, 2013). The trend of land and property markets toward fewer, larger firms and the growing differentiation between developer and investor or end user, are theorized to have increased the development industry's motivation for short term profit-seeking and reduce their sense of social responsibility (Adams et al., 2008). US studies that examine developers' rationale for avoiding compact urban forms reveal a perception of insufficient consumer demand and structural barriers that increase the complexity and cost of compact development, such as the absence of transit, zoning restrictions (e.g. setbacks and parking requirements), and uncertainty in the approval process (Feldman, Lewis, & Schiff, 2012; Noland, Weiner, DiPetrillo, & Kay, 2017). Developers in Southern Ontario have reported a similar set of barriers that increase the cost or marketability of compact development projects, including the availability or timing of transit investments, unsupportive planning restrictions and engineering standards (particularly with respect to parking requirements), and high development charges within built up areas compared with greenfield areas (Blais, 2003).

Despite shared profit-seeking strategies, developers have been found to be highly diverse in their practices, preferences and motivations (Coiacetto, 2000; Rosen, 2017). Within and between regions, developers report different visions, levels of risk-taking, patience, and collaboration with municipalities and this variation is likely to create variability in the ability and willingness of developers to build compact urban forms within different geographies (Coiacetto, 2000; Feldman et al., 2012). A number of studies describe developers as embedded in their local planning and development networks, seeking projects that are compatible with their local knowledge and expertise and their established relationships and reputation with local implementing actors (Charney, 2005; Coiacetto, 2000; Henneberry & Parris, 2013). Coiacetto (2000) found that attitudes and understandings of Australian real estate developers were highly localized, resulting in differences in built form across regions. In a study of patterns of office development in Toronto, Charney (2005) found developers to select projects in familiar locations. This locational embeddedness was attributed to the expertise and time required to develop local trust and

knowledge and which were necessary for a development's success. Locational embeddedness may provide municipal governments opportunities to form specific relationships with developers to further local growth management agendas; however, it may also serve to limit the availability of developers for certain types of development projects, such as infill and brownfield redevelopment. Rosen (2017) found that condo builders in Toronto who reported a greater sense of social responsibility were more likely to take on higher risk or lower profit projects such as brownfield redevelopments.

Other scholars have pointed out that the economic motivations of development companies, real estate professions and home building companies can be compatible with growth management objectives under certain situations. In a review of business motivations, Leo et al (1998) argued that businesses can be supportive of local government efforts to reduce sprawl if they perceive compact development as creating a competitive advantage that will attract business and development to their community. As well, developers may support policies to reduce sprawl if such policies limit opportunity for public opposition (Leo, 1998). However, a failure to balance restrictive policies where growth can occur with policies that offset the lost development opportunities on the urban fringe, such as zoning for higher densities within the urban centre, may create opposition to growth management from the development industry (Downs, 2005; Leo, 1998). Leo et al. (1998) contended that Portland, Oregon's creation of both development constraints and opportunities that ensured there was no net loss in development potential was a critical factor in the acceptance of Portland's Growth Management System by members of the development community. Few empirical studies examine the presumed relationship between developers' motivations and characteristics and plan outcomes. In an examination of developers and planning agencies in New Zealand, Laurian found no significant relationship between a developer's capacity or commitment to meet planning objectives on the successful implementation of an environmental plan (Laurian et al., 2004a).

Inter-organization Relations

Vertical Consistency

The extent to which a municipality conforms to the regulatory growth management planning framework imposed by higher levels of government (defined here as "vertical consistency") has a significant impact on growth management implementation. In North America, state and provincial growth management plans vary considerably in the extent to which they require vertical consistency. Plans that do not require local official plan conformity to higher level plans offer municipalities the maximum amount of flexibility. Such regimes operate under the premise that municipalities require the ability to adopt policies and programs that are best suited to their unique social, political and economic context. Under more prescriptive growth management regimes, official plan conformity is a requirement, but

municipalities retain control over the type and number of supporting policy instruments, regulations and incentive programs.

Growth management regimes that do not require local Official Plan conformance to the higher level state or provincial plan have been credited by some scholars with providing more context-sensitive, and locally supported outcomes. Early work in the field of program implementation adopted the perspective that prescriptive plans were doomed to failure as a result of the complexity in coordinating actions across multiple levels of government (Bardach, 1977; Conteh, 2011; Hupe, 2011). Much of this work built on the findings of a widely cited case study titled "Implementation: how great expectations in Washington are dashed in Oakland: or, why it's amazing that federal programs work at all, this being a saga of the Economic Development Administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes" (Pressman & Wildavsky, 1984). This study concluded that the larger the number of agencies or individuals ("clearances") between the policy maker and the implementing agency, the less likely that policy would be successfully implemented (Pressman & Wildavsky, 1984). Underlying the "clearance" argument was the logic that adherence to a policy at each successive stage along the chain of organizations would need to approximate 100% for the final, cumulative outcome to be in close compliance with that policy's goals (M. J. Hill & Hupe, 2009; Pressman & Wildavsky, 1984). Others found that the type and quality of the interactions between upper tier government agencies and local level implementing agencies (e.g. such as coordination and level of engagement) had an important influence on the implementation of policy (Bardach, 1977; Conteh, 2011).

Planning implementation literature has similarly emphasized the importance of local coordination and conformity to state or provincial growth management objectives as a critical variable in successful growth management implementation. Within this literature, however, scholars have typically viewed conformance as an achievable, technical exercise rather than an objective doomed to failure. Results of these studies have been mixed: analyses of US state growth management programs have found a lack of vertical consistency can obstruct efforts to contain sprawl (Bengston et al., 2004; Howell-Moroney, 2007), while others – mostly empirical studies - have failed to find a correlation between programs that required vertical consistency and indicators of program success such as higher population densities (Ben-Zadok, 2005; Carruthers, 2002b; Ingram et al., 2009). Scholars have attributed the weak correlation between consistency requirements and compact development to the presence of other interdependent and influential social and political factors (Carruthers, 2002b; Ingram et al., 2009). Studies of Florida's growth management program, for example have found that despite its vertical consistency requirements, Florida's urban form had become increasingly less dense and more concentrated in rural rather than urban counties (Ben-Zadok, 2005; Boarnet et al., 2011). This contradictory outcome is attributed in part to the

lack of state funding for infrastructure, variability in the local coordination of development and infrastructure, and the introduction of conflicting, sprawl-promoting legislation such as Florida's 2006 Agricultural Economic Development Act (Ben-Zadok, 2009; Chapin, 2007).

Horizontal consistency

Horizontal consistency is the coordination of plans and plan implementation between local municipalities within a region to ensure a consistent approach to growth management. Regional coordination can help mitigate the effects of variability in land prices, which can draw people from the expensive urban areas to the less expensive rural periphery (Brody et al., 2006). Coordination of approaches across municipalities has been shown to be particularly important for the implementation of municipal containment policies such as growth boundaries and service boundaries. While effective in managing growth within a particular municipality, growth boundaries have been demonstrated to have broader scale negative consequences for urban sprawl when implemented in isolation from other regions and without the use of complementary policies (Carruthers, 2002a; Downs, 1992; Fischel, 2004). Growth boundaries surrounding cities in California for example, have been found to effectively discourage development at the city periphery and to concentrate it in the core, but they also were found to cause leapfrog development in neighbouring communities that did not have urban growth boundaries (Landis, 2006). Carruthers (2002b, p.1975) identified fragmented planning approaches as a leading factor in the failure of many growth management planning efforts including California where "...the problems that have arisen through growth control in California are directly linked to the inconsistencies that emerge when communities are required to plan without co-ordinating with one another". Similarly, Boyle and Mohamed (2007) found that a tendency toward small local governments and local decision making, was a key factor in the ineffectiveness of Michigan's smart growth inspired planning strategies.

Woo and Guldmann (2011) found that the impacts of poor horizontal coordination can be mitigated by the presence of vertical consistency requirements. In their study, they found growth to be better contained to urban growth boundaries and urban service boundaries for municipalities located within states with vertical consistency requirements (Woo & Guldmann, 2011). Comparative studies have found local containment strategies to be more effective at containing growth in the more centralized planning environments of the UK than in Canada, where municipal and regional agencies operate with less oversight from provincial and federal agencies (Jackson, Gopinath, & Curry, 2012). In British Columbia, for example, the multiplicity of uncoordinated government agencies instead of a single governing body to oversee growth and development at the urban-rural fringe, was found to help to perpetuate inefficient land use patterns (Meligrana, 2003).

Societal Environment

Othengrafen (2010) describes the societal environment as the underlying and unconscious beliefs, perceptions, thoughts and feelings that serve to structure and reinforce the planning environment. Societal environment barriers frame how implementing agencies perceive and respond to planning challenges (Knieling & Othengrafen, 2015). As taken-for-granted societal norms, the beliefs and perceptions that make up the societal environment are rarely explicitly acknowledged or articulated (Knieling & Othengrafen, 2015) and as such may be more resistant to change than those that are more visible and tangible (Reimer, 2013). Scholars have identified a number of societal-scale barriers that play an important role in the transformation of urban form, including property rights advocacy and NIMBY, auto dependency, and market economies.

Property Rights Advocacy and NIMBY

Advocacy groups are described by scholars and practitioners alike as having a significant influence on the implementation of planning policy (Downs, 2005). Homeowners, in particular, can be powerful advocates for restrictions on urban intensification, although the extent to which Canadian homeowners can exercise their property rights is limited (compared to their US counterparts) given the absence of property rights from the Canadian Charter of Rights and Freedoms under the Constitution Act, and the fact that such rights can be changed through legislation. Despite the absence of constitutionally embedded property rights, Canadian and American homeowners share similar motivations to resist changes that may impact their properties. Homeowners are more likely than others to raise objections to development and are strongly associated with NIMBY – the protectionist attitudes and oppositional tactics used by property owners when faced with potential land use changes (K. R. Cox & McCarthy, 1982). Protectionist actions by homeowners to preserve low density urban forms can stem from concerns about personal safety, and loss of neighborhood amenities as well as from racism, elitism or distrust in government (G. Ellis, 2004). Since home and property ownership constitutes the primary source of Canadian household wealth (Chawla, 2011; Metzger, 2000), opposition to growth management policies can also stem from financial concerns where proposed land use change is perceived as a risk to property values and future returns on investment. Concern about investment is exacerbated by a phenomenon called the "endowment effect", in which the property owner puts a higher value on his/her goods than he/she would be willing to pay for it (Levine, 2006). The inflated value of property perceived by property owners, coupled with the fact that property constitutes a major share of a household's wealth can lead to intense opposition to new development in existing neighbourhoods (Levine, 2006).

Home owners tend to comprise a more affluent group than non-home owners, and consequently their views on issues relating to urban intensification and infill development can be disproportionately represented in municipal politics. Coalitions of such groups have been found to exert substantial pressure on local politicians on issues relating to urban development (Been, Madar, & Mcdonnell, 2014; Gilbert, Wekerle, & Sandberg, 2005; Jacobs, 2010). This can lead to a reinforcement of existing policies that protect their interests, including policies that inhibit urban intensification, mixed uses and alternative transportation options (Sorensen, 2010).

Property rights advocacy and NIMBY lobbying have been credited with constraining local growth management efforts. In Toronto, Curic and Bunting (2006) found that NIMBY responses to intensification of a former hydro corridor in Toronto led to considerable delay and expense. Developers and planners in London, Ontario cited the lack of public support and understanding for intensification projects involving brownfields as a barrier to their redevelopment. At a broader scale, a strong property rights movement in the US successfully challenged and overturned Oregon's 30 year old comprehensive land use planning program (Jacobs & Paulsen, 2009). More recently, property rights advocacy entrenched in the US's "Tea Party" politics was found to pose a significant threat to the sustainability objectives of regional planning (Trapenberg Frick, 2013).

Property rights advocacy is increasingly viewed by scholars as a self-reinforcing value that inhibits changes to urban policy (Jacobs & Paulsen, 2009; Jacobs, 2010; Sorensen, 2011b). Originating from early agrarian and anti-urban sentiments, property ownership is an entrenched North American value (de Neufville & Barton, 1987; Muller, 2004; Wunderlich, 2000). Facilitated in Canada by supportive Federal policies such as mortgage insurance, provincial funding for highways and water infrastructure, lower land prices at the urban fringe, and value of the aesthetics and restorative health benefits of suburban and country living, Canadians place a high value on homeownership, particularly in suburban and exurban locations (Harris, 2000; Harris, 2004) although housing preferences for young Canadians may be changing (Carrick, 2014). Homeownership is theorized to be further reinforced by a North American culture of possessive individualism, characterized by a belief in minimal public regulation of private property, and the value private over public spaces (Choko & Harris, 1990; Harris, 2004). Taken together, these values constitute a significant challenge for municipalities attempting to implement certain growth management policies. Given the scale of homeownership and the orientation of planning toward participation, NIMBYism has emerged as a ubiquitous challenge facing intensification efforts to alter the prevailing low density urban form (Dear, 1992; Searle & Filion, 2011).

Auto dependency

Auto dependency has been cited as one of the most significant barriers to the implementation of growth management policies, as a result of its role in perpetuating low density development patterns (Filion, 2003). Widespread car ownership has permitted the spatial separation of housing and employment and has increased access to lower land prices at the urban periphery (Handy, 2005). Access to inexpensive land on the urban periphery permits low density urban forms, such as single family housing and horizontal industrial and commercial buildings and the provision of ample and free parking for homeowners and workers. Growth in suburban residential and commercial development has created new "edge cities", which can outcompete parent cities for economic growth and development (Garreau, 1991). Urban regions and the edge cities within them have become increasingly polycentric and commuting patterns occur in all directions.

The automobile has, more than any other mode of transportation, created the political, cultural, economic and structural conditions for self-reinforcement (Khayesi & Amekudzi, 2011; Urry, 2004). Low density development designed to accommodate car travel can create greater reliance on the car by inducing a higher frequency of trips and discouraging alternative forms of transportation since suburban development does not have the density required to support public transit (Cervero, 2003). The separation of land uses and configuration of roads in suburban areas makes travel by active means, such as walking or cycling, difficult and sometimes unpleasant. The affordability and convenience of car travel reduces the effect of distance on consumer choices such that there is little incentive to live in close proximity to employment or commercial districts (Handy, 2005). In response, households have self-organized around the necessity of car ownership (Filion & McSpurren, 2007). Car-oriented travel patterns and preferences feed back into transportation investments through political pressure for road improvements, free parking and low density development patterns.

Car usage is further reinforced through socio-cultural norms and values, including an emotional attachment to automobile transportation. The car's provision of increased privacy, flexibility, comfort, and speed over public transit has created novel "socialities" whereby new lifestyles, expectations, activities and cultures have been created that otherwise did not and would not exist (Urry, 2004). Additionally, the socio-cultural importance of cars is further reinforced by its widespread interpretation as a symbol of financial and social success, safety, freedom, and masculinity (Urry, 2004). The cultural attachment to car travel is an important factor in political and community resistance to investment in public transportation and high density developments, as evidenced by former Toronto Mayor, Rob Ford's pronouncement that investments in light rail transit represented a "war on the car" (Church & Grant, 2012). Reflecting voter

preferences for unencumbered car travel, Ford led a move to reverse fully-funded plans for a network of light rail transit lines, and instead proposed subway expansions that would result in a modest service improvement for transit riders. The subway expansion plan eventually failed due to a lack of broader political support, and while much of the original light rail transit plan has returned to the political agenda, the controversy resulted in significant delays and costs for the transit system.

The primacy of car transportation in urban policies and the entrenchment of behaviours and preferences have made it difficult to alter development patterns that favour the car. For example, although research has shown that road improvements and new highway development induces more car travel (Cervero, 2003), the reverse proposition – that fewer roads and highways will reduce car travel – is not supported by the evidence (Handy, 2005). Thus changes to urban form to accommodate other forms of travel such as transit or cycling, are necessary but insufficient to change the current travel modes. Although in many cities public transit usage has increased as a result of concerted efforts to change the trajectory of urban sprawl, it "still lags considerably behind inflation-adjusted increases in public transit subsidies" (Brown, Morris, & Taylor, 2009, p. 175).

Growth Imperative

The shared motivation for economic growth by the decision making elite has been theorized by Molotch (1976) and Logan and Molotch (1987) as well as others to structure the planning environment and influence the decisions and actions of implementing actors. Local governments are constrained in their decision making by a perceived need for economic growth in order to complete with other municipalities for mobile capital, and by a limited capacity to generate revenue (Harding, 1995; Logan & Molotch, 1987). Business interests share politicians' pro-growth motivation since they benefit directly from decisions that maximize property values and attract local investment. The unified objectives and decision making power of elected officials and business stakeholders are theorized to create formal and informal networks called "growth coalitions" that exert a significant influence on municipal decision making. Growth coalitions can include other pro-growth stakeholders such as developers and landowners, as well as those who are involved in property development such as construction, real estate, finance, architecture, and planning industries. Other indirect beneficiaries of urban economic growth and development include universities, cultural organizations and small businesses.

The presence of a growth coalition can have implications for growth management when growth management policies conflict with aspirations for economic development. Eidelman (2010) contends that municipal politicians' desire for local investment and tax revenue from development leads them to support developers' preference for prevailing low density suburban developments, thus undermining

growth management planning efforts. Accounts of suburban development in the US identify growth coalitions as integral factor in the continued expansion of suburban areas (Jonas & Wilson, 1999; Logan & Crowder, 2002). The efforts of a growth coalition in Whistler, BC was found to contribute to rapid, uncoordinated settlement growth, incentives for recreation developments, and weak implementation of municipal design and density policies (Gill, 2000).

Slow growing or economically depressed communities may be more susceptible to political and economic pressures for growth, making municipal councils in slow growing communities less critical of development proposals (Leo & Brown, 2000; Leo & Anderson, 2006). In a study of the slow growing City of Winnipeg, Leo (2000) found that the municipality's orientation toward growth led to the development of excessive infrastructure capacity (e.g. road and bridge linkages), which exacerbated sprawl by encouraging outward development, inducing car travel and reducing commuting times. In a cross-US study, Feiock et al. (2008) found that wealthier and faster growing communities were more likely to adopt growth management policies than municipalities facing economic challenges (Feiock et al., 2008). Similarly, Lee and Choi (2011) found that wealthy counties in Colorado were more likely to support the implementation of growth management policies than less well-off counties.

New political voices and pressures, represented by increasingly influential stakeholders and changing political economies, have called into question the continued relevance of a growth machine model for urban politics (Bradford, 2010; MacLeod, 2011). Nevertheless, the growth machine theory, now more nuanced to account for changing power structures and interests, has been argued to continue to have significant explanatory power (Jonas & Wilson, 1999). The persistence of the theory may be due in part to the growth coalitions' self-reinforcing characteristics. Coalitions act to minimize opposition to development and generate public acceptance of growth by promoting growth as a public good that benefits all citizens (Dilworth & Stokes, 2013). Pro-growth ideologies are established and maintained through boosterism, the promotion of "trickle down" benefits from growth, and the adoption of neoliberal policies (Dilworth & Stokes, 2013). Through the generation of support for pro-growth ideologies, growth coalitions are thought to moderate the level of pressure from residents and environmental advocacy groups seeking to reign in or manage growth.

Market Distortions and Neoliberalism

Market distortions that fail to account for externalities of urban sprawl constitute a challenge to growth management objectives (Slack, 2002). These distortions stem from individual cost-benefit decision making models that support the "highest and best use" characteristic of the market, where more productive urban land uses are priced higher than less productive farming uses (Nechyba & Walsh, 2004).

Scholars have pointed to the failure of a market system based on individual cost-benefit decision making to account for the costs of traffic congestion, social isolation, and loss of ecosystem services provided by agricultural lands and natural areas as a result of car-oriented development (Brueckner, 2000; Brueckner, 2001). Failure to internalize true costs results in an underpricing of development to the consumer. Inaccurate price signals encourage households and businesses to make decisions that maximize their private benefits and minimize private costs, while ignoring social costs and benefits.

Municipal, provincial and federal policies, such as transportation infrastructure investments, can create inaccurate price signals through subsidies for low density residential and commercial development. As well, the absence of policies to rectify market failures can present a challenge to growth management efforts. Natural areas provide a wide variety of services, including groundwater recharge and filtration, biodiversity, temperature moderation, and carbon sequestration, all of which are not accounted for in the purchase price of agricultural land for urban development purposes. Slack (2002) and others (Blais, 2010; Brueckner, 2000; Brueckner, 2001; Carruthers & Ulfarsson, 2003; e.g. Irwin & Bockstael, 2004), for example, argue that the social costs of pollution, congestion, loss of open space and agricultural lands are not borne by the developer and consumer, but rather by the broader public. Brueckner (2000; 2001) identifies air pollution due to commuting, loss of natural and agricultural areas at the urban fringe, and long term infrastructure costs as the three main externalities that are not internalized by developers. Underpricing of transportation in North America has received particular attention in the literature, with some scholars estimating that US subsidies to the operating costs of road infrastructure amounts to five times the charged price (Blais, 2010; Mills, 2001).

The emergence of neoliberal political and economic ideologies may exacerbate the challenge posed by market distortions that favour unrestricted low density urban development. Emerging from a perceived failure of Keynesian economics and urban 'managerialism', the neoliberal paradigm is characterized by a belief in the superiority of market-based solutions and the withdrawal of government from the management of public problems (Filion & Kramer, 2011; Sager, 2011). Neoliberal thinking rationalizes certain barriers to growth management such as property rights, and through its emphasis on privatization and deregulation can hinder government efforts to intervene in the market to correct perverse subsidies (Sager, 2011). In its rejection of urban planning in favour of market solutions, the neoliberal paradigm undermines the legitimacy of planning policy and programs intended to manage growth (Fasenfest, Ciancanelli, & Reese, 1997; Sager, 2011).

Scholars examining the influence of neoliberalism on growth management efforts have found that neoliberal governments can reduce organizational capacity and planning resources for managing growth.

Filion and Kramer (2011) found that a neoliberal shift in Canadian and municipal politics contributed to the decentralization of Toronto's planning authority into smaller, competing regional governments, which hindered the City's capacity to coordinate planning for growth on a metropolitan wide scale. As well, restrictions on public sector resources and a shift in priorities toward economic development in Toronto thwarted planning projects designed to address social and environmental concerns (Filion & Kramer, 2011). Walks (2014) found that former Toronto Mayor Rob Ford's "roll back" neoliberalism helped to dismantle planned improvements to public transit and cycling infrastructure and further entrench a culture of automobility and its accompanying low density urban form.

Conclusion and Emerging Questions

The plan and policy implementation scholarship reveals a large number of barriers to implementation, ranging from local planning products and the practices and motivations of individual actors, to the broad scale, complex structuring forces that create the political, economic and socio-cultural frames that shape local planning practice. Theorized and demonstrated interactions between barriers suggest that barriers may form mutually reinforcing groupings, or in some cases may conflict to create contradictory or unstable relationships. From this literature, three general observations and related research questions emerge.

First, while the literatures reviewed in this chapter identify a large number of barriers to implementation, they are somewhat undifferentiated in terms of their relative importance and relevance to specific local contexts. Policy implementation research has been found to be fragmented across a wide range of disciplines, with different fields exploring specific questions about implementation and limited integration between disciplines (Saetren, 2005). Scholarly work within the plan implementation fields, as reported here and elsewhere, has been found to emphasize the role of micro- and meso- scale factors on implementation, such as organizational characteristics, discourses and power relations (Healey, 2007; Koontz & Newig, 2014). In contrast, scholars within the fields of political science and urban sociology, tend to emphasize the importance of broad structural driving forces such as elite actor networks, governance regimes, and social processes influencing planning practices (Healey, 2007). With limited engagement between disciplines, opportunities may have been missed to identify and examine the causal forces that obstruct implementation and their relative importance. If one of the purposes of policy and plan implementation scholarship is to understand what drives local conformance and non-conformance to broader regional plans so as to assist in the targeting of actions to facilitate improved conformance and consistent outcomes, an understanding of the key underlying belief systems, identities, cultural mores and norms that guide action and outcomes is essential. This research seeks to fill that gap by exploring the

questions: What are key driving forces that obstruct local implementation of growth management plans and how do these driving forces operate to affect local implementation?

The second observation relates to the role and nature of interactions between variables that affect implementation. Integral to an understanding of implementation in environments where behavioural change is required is an awareness of the interactions between actors and the organizational, social, political and economic structures within which they operate. These interactions are important because they may lead to the reinforcement of existing behaviours, and can create conflicts and opportunities for the introduction of new behaviours. The extant research suggests that implementation barriers do not operate in isolation, but rather interact in various ways and at various scales to support or contradict each other. This research seeks to clarify these relationships by exploring in more detail the ways in which legal, organizational and political frameworks, societal and professional belief systems, values and norms, and actor behaviours interact to reinforce existing planning practices or generate opportunities for new approaches. Of interest are the questions: How do the barriers to implementation relate to one another, and what are the mediating mechanisms that define these relationships? How do barriers interact to reinforce the status quo? Where are there opportunities for change?

The third and final observation emerging from the literature review pertains to the role of local context in implementation studies. Studies within the broader planning field have explored the relationship between spatial policies and plans and the symbolic and cultural meanings and identities affixed to a place (Cadieux, Taylor, & Bunce, 2013; Richardson & Jensen, 2003). Local contexts, such as histories, geography, economies and socio-political environments, may create different perceptions, needs and value systems of social and political actors, which in turn could promote specific planning practices. These frames are largely absent from the planning and policy implementation literature reviewed in this chapter – a deficiency that may result in an aspatial approach to spatial policy analysis (Richardson & Jensen, 2003). This research proposes to explore the role of local context as mediating factor in the expression of barriers by answering the questions: How do the key barriers to local implementation vary within different local contexts? Are some barriers more important/less important in certain local contexts than others?

Chapter 3. Theoretical and Conceptual Frameworks

The sheer number of explanatory variables proposed to impact implementation, some scholars have argued, threatens to hamper our understanding of the primary mechanisms influencing implementation (O'Toole, 2000) – a problem that has led many theorists to seek a synthesis. These syntheses aim to identify the key driving forces that obstruct implementation, which is a question of interest to this research.

In the field of policy implementation, syntheses of factors affecting implementation have emphasized the importance of what has been termed "top-down" variables, or the traditional governance structures that frame the implementation environment (Pressman & Wildavsky, 1984; Sabatier & Mazmanian, 1979). Top-down variables can be considered analogous to macro-scale, societal environment barriers. Pierre (1999), for example, adopts a top-down approach to describe how different models of urban governance influence political motivations and responsiveness to certain interest groups, which in turn shapes policy outcomes. Also emphasizing the importance of top down variables, Hill and Hupe (2009) explain implementation in terms of a hierarchy of governance, whereby institutions (constitutive governance) influence actors' rule making (directional governance), which in turn influences implementation (operational governance).

Others have argued that "bottom-up" variables – the actions and beliefs of implementing actors and agencies and their use of discretion – is key to our understanding of how policy is translated into action (deLeon & deLeon, 2002; Lipsky, 2010). These variables generally relate to the planning environment scale. A seminal work by Pressman and Wildavsky (1984) emphasizes the importance of bottom-up variables by describing implementation as the product of the number of interactions and actors required to implement a policy. They propose that the greater number of actors and interactions between the creation of a policy and its implementation, the less likely that policy will be implemented as it was intended. Others have explored how and when gaps between top-down rules and local needs and circumstances are bridged through the use of discretion by street-level bureaucrats, resulting in impacts on implementation and outcomes (Booth, 1996; Lipsky, 2010; Loh, 2011; Padeiro, 2016). Collaborative planning scholars have explored how the engagement of stakeholders in resolving local issues can lead to negotiated solutions and greater acceptance and adherence to those solutions, which is theorized to produce greater conformance of actions to the original intent of policies and plans (Healey, 2003; Innes, 1992; Innes, 2004; Koontz & Newig, 2014).

Some substantive efforts have been made in the policy implementation field to merge or further simplify the polarizing top-down and bottom-up view points. Sabatier's (1986) advocacy coalition framework of policy change, for example, placed the analysis of implementation into a broader and longer term context of policy creation and change, where actors form coalitions to negotiate for policies and outcomes that align with their beliefs. Matland's (1995) ambiguity/conflict model described implementation as a product of two key variables - a policy's ambiguity in purpose and its degree of contention. Under this model, contentious policies that are unclear in their objectives are less likely to be implemented than widely supported policies that clearly demonstrate a solution to a recognized problem. An integrated implementation model developed by Walker (2012) similarly proposed that the root of implementation failures lay in the policy development process, where policies are either too ambiguous or are inadequate to address real policy challenges. These syntheses of policy implementation have tended to place the majority of the responsibility for implementation failures on policy design and the organizations and actors responsible for implementation.

With some exceptions (e.g. Filion, 2010b; Healey, 2003), syntheses of implementation variables have placed greater emphasis on tangible, visible barriers to implementation as the primary objects of investigation. Underlying many studies of implementation is the assumption that plan implementation is the product of the regulatory environment (e.g. laws), outputs of the planning process (e.g. policies and plans), and actions of actors involved in implementation (e.g. planning approaches). While these factors are likely to play a significant role, such studies may over emphasize the technical, rational decision making component of land use planning and implementation, and underestimate or ignore less visible, cultural influences on planning practice (Booth, 2011; Friedmann, 1967; Othengrafen & Reimer, 2013). Causal, underlying barriers may be so tightly wound with existing worldviews and practices that they can be difficult to identify and describe. Underlying power structures, for example, can influence problem identification, the range of available policy solutions, and privilege certain interests over others (Healey, 2003). For the implementation of spatial plans, place-based ideologies and strategic representations of a place in public discourses can influence public and agency support for new planning policies (Bunce, 2004; Cadieux et al., 2013). Increased mobility, changing settlement patterns, and a growing consumption of natural resources for either leisure or conservation can create the underlying conditions, belief systems and motivations that favour certain spatial planning approaches over others (Cadieux & Hurley, 2011; Richardson & Jensen, 2003). Failure to specify these and other underlying assumptions and belief systems that lead to particular planning behaviours may risk "giving rise to unwitting distortions when basic preconceptions have not been made explicit" (Friedmann, 1967, p. 226). Understanding the mechanisms by which underlying factors purposefully or inadvertently constrain actions can help explain

how policies are implemented and why they may or may not succeed in meeting their goals (Lecours, 2005).

Two theoretical frameworks have emerged in recent decades to explore the complex interrelationships between planning practice, and the top-down, bottom-up, underlying and invisible variables that structure the environments in which spatial planning takes place. These frameworks provide a theoretical lens and analytical tools to help answer the questions that emerged from the previous chapter, namely: 1) What are the key barriers to implementation? 2) How do the key barriers to local implementation vary within different local contexts? 3) How do the implementation barriers relate to one another? and 4) Where do opportunities exist for change? The frameworks differ from many previous approaches to understanding implementation in that they permit an examination of both bottom up variables and top down variables and the interactions between them. The approaches are particularly well suited to exploring not just the variables themselves, but also the mechanisms by which they interact to enable or constrain implementation.

The first of these theories, called new institutionalism, seeks to understand how broad forms of social organization or "institutions" interact with actors to create the logics and motivations for action (González & Healey, 2005; Healey, 2005; Lowndes, 2009; Lowndes & Roberts, 2013; Pierre, Peters, & Peters, 2008; Streeck & Thelen, 2005; Van Der Heijden, 2010; Verma, 2007). Within this theory, institutions are generally understood as the "frameworks of rules, norms and practices which structure action in social contexts" (Healey, 2007, p. 64). Institutions refer to a wide range of types and scales of social phenomena that structure interactions, preferences, and ultimately, decisions and behaviour. New institutionalism can assist with the analytical challenge associated with a large number and type of implementation variables by permitting the organization of implementation barriers into common framing themes of social organization. Within these themes, the framework provides a range of analytical tools to explore how barriers interact to support or contradict each other, and how and when place-specific, complex institutional networks enable or constrain action (Servillo & Van Den Broeck, 2012). Recent developments in new institutionalism provide improved conceptual understandings of the role and power of actors to invoke change within the broader structuring forces of institutions (Mahoney & Thelen, 2009). The framework recognizes that planning practice is variable and contingent on its institutional setting and context, and that the dissemination and adoption of new spatial planning goals can require changes to the formal and informal institutions that make up the institutional environment (González & Healey, 2005). In this regard new institutionalism is particularly apt for examining strategic planning for socio-spatial transformation (Healey, 2007).

A second theoretical framework, referred to as a theory of planning culture, has also been used to understand the structuring forces that influence planning practice. Like new institutionalism, the framework places the structuring forces that frame action at the centre of analysis. The theory provides a conceptual model for understanding the hierarchy of formal and informal variables that create the traditions, approaches and "cultures" that characterize localized planning practice. Scholars have used the model to analyze similarities and differences between local cultural attitudes, norms and values to understand how these factors create differences in the local implementation of common spatial planning objectives (Knieling & Othengrafen, 2015). While less conceptually developed than new institutionalism in terms of providing a basis for understanding how structuring forces become entrenched or vulnerable to change (Z. Taylor, 2013), the model's scalar focus permits analytical distinction between broad, societal scale framing variables and those that are more localized and unique to specific regions. This distinction is helpful to explore variation in key barriers to implementation across different local contexts.

Recognizing the potential importance of "invisible" and contextual factors that influence individual and collective action, the interactive nature of these structuring factors and variability in how they manifest in different regions and at different scales, this research adopts a conceptual framework that integrates new institutionalism with the scalar focus of a model of planning culture. The theoretical basis for these two frameworks, and how they are integrated to provide a conceptual framework for understanding implementation, are described in more detail in the subsequent sections of this chapter. The chapter ends with a detailed model for conceptualizing barriers to growth management plans.

New Institutionalism

Scholars of new institutional theory generally define institutions as the range of structures, both formal (e.g. governments, laws and constitutions) and informal (e.g. rules, identities and beliefs), that together form the basis for actors' perceptions and behavior (M. J. Hill & Hupe, 2009; Lecours, 2005; Lowndes, 2009). Institutions are thought to emerge as a means to help actors make sense of complex situations by creating a set of common expectations and understandings, and offering guidance on a range of socially-acceptable courses of action (Boin & Kuipers, 2008). In doing so, institutions help actors solve problems and create order. While institutions may first develop as a means to solve collective problems, they can also establish patterns of behavior and shared narratives that, in and of themselves, are viewed as desirable and appropriate and become taken-for-granted. At that point, institutions may persist even if they become ill-suited to solve new societal problems.

Institutions have not commonly been the focus of theories to understand change and obduracy in urban forms (Pflieger, Kaufmann, Pattaroni, & Jemelin, 2009; Verma, 2007). Cities and the politics,

decision making and planning practices that shape them are, however, particularly well-suited to exploration using a new institutional conceptual framework since they are influenced by and embedded within a wide range of institutions, including shared scripts, values, norms and regulatory structures, that may be historically-driven, codified and enforced (Teitz, 2007). At their most basic conception, cities and their environs are institutional structures themselves, and their physical presence can influence and shape identities, policy options and planning actions. The organizational structures, interrelationships and cultures of municipal planning departments, city councils, the local development industry, and neighbourhood groups may also influence how planning challenges are interpreted and resolved. These institutions may be intertwined with broader social-constructions such as values and beliefs surrounding the economy, the environment and the respective roles of citizens and governments to solve collective problems.

Recent notions of new institutionalism differ from earlier institutional theories in that they internalize as a main point of inquiry both the formal and informal institutions that impact action. Rather than representing a unified body of thought, new institutionalism is comprised of a collection of analytical approaches that each place a different emphasis on how institutions are defined and how they operate to influence action (P. A. Hall & Taylor, 1996; March & Olsen, 2009; Pierre et al., 2008). Pierre and colleagues (2008) identify as many as seven main approaches within the field of new institutionalism that draw variously on economics, political science and sociology to offer explanations for the role of institutions in creating the logics, motivations and constraints for individual and collective action. Hall and Taylor (1996) describe variation within new institutional theory more broadly by proposing three main streams of new institutionalism: historical institutionalism, rational choice institutionalism and sociological institutionalism. Within and between these theoretical streams is considerable variability in how institutions are thought to interact with agency to influence outcomes (P. A. Hall & Taylor, 1996; Lowndes, 2009). Using Hall and Taylor's (1996) broader categorizations, the differences and similarities between the variants of new institutionalism are expanded upon below.

Three Variants of New Institutionalism

The first of the approaches to new institutionalism is rational choice institutionalism. Emerging from the field of economics and recognizing the deficiencies of classic economics in explaining behaviour, institutions within the rational choice stream are conceived as the "rules of the game" that create stability and reduce the chaos that would occur if actors operated solely according to their own self-interest (Lowndes, 2009). Actors within this theoretical stream are conceived as strategic decision makers who make choices to maximize their preferences within the bounds of existing organizations and relational structures that create incentives and disincentives for certain actions. Actors' preferences are

generally understood as exogenous and independent of the institutions within which they operate and are not influenced or constructed by their institutional environment (P. A. Hall & Taylor, 1996). In some forms of rational choice institutionalism, action is considered to be constrained by the desire of actors to minimize transaction costs (e.g. the monetary or social costs of a particular interaction, decision or behaviour) (Alexander, 2001). Of the three variants of new institutionalism, the rational choice stream tends to conceive institutions the most narrowly, emphasizing the more formal elements that structure society, such as organizations and governments, but also including some less formal elements such as relationships and rules of engagement (Lecours, 2005).

The second variant of new institutionalism is historical institutionalism. Historical institutionalists look to the historical context and sequence of events to understand how past institutions have constrained or facilitated subsequent action (Pierre et al., 2008). Compared to rational choice scholars, historical institutionalists define institutions more broadly as the "formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy" (P. A. Hall & Taylor, 1996). Informal institutions such as norms and conventions tend to be considered products of the formal structures in which they are embedded (Lecours, 2005). Studies within the historical institutional literature typically organize around the principle of contingency or "path dependency" and look for "critical junctures" in which external events or ideas upset the assumed stability of institutions and help to create new institutions (P. A. Hall & Taylor, 1996). Actors within this theoretical stream are bounded in their choices by the reduction of feasible or appropriate options due to past decisions and institutional arrangements.

Sociological institutionalism represents the third variant of new institutionalism. The sociological stream takes a socio-cultural approach to understanding the creation of institutions and their influence on action. Typically more inclusive in its definition of institutions than either rational choice or historical institutionalism, sociological institutionalism conceives institutions as "not just the formal rules, procedures or norms, but the symbol systems, cognitive scripts, and moral templates that provide the 'frames of meaning' guiding human action" (P. A. Hall & Taylor, 1996, p. 947). Within the sociological institutional framework, actors are conceived as both bounded by and embedded within their institutional context, in that informal institutions such as norms and moral templates become internalized by actors and work to shape their perceptions, motivations and cultural frames that ultimately influence their behavior (Lowndes, 2009). Similar to historical institutionalism, institutions under the sociological institutionalism stream are understood as structures that socialize actors into adopting the underlying values and assumptions that define the institution (Pierre et al., 2008). As opposed to strategically acting to maximize their attainment of goals and preferences, as theorized by rational choice institutionalists, actors are

thought to seek out solutions within a subset of culturally-appropriate options (March & Olsen, 2009). Whereas historical institutionalists have typically focused on the role of external shocks or "punctuations" on the equilibrium of an institution, sociological institutionalists have tended to place greater emphasis on the role of changes to the value systems underlying the institution (Pierre et al., 2008).

Power and Agency

Early works using new institutional theories came under criticism for their tendency to over emphasize the role of structure and under theorize the role of agency and power on political and social behavior (Pierre et al., 2008). One of the challenges in understanding the role of agency in institutions – particularly for historical and sociological institutionalists – is the fact that institutions and agency are not considered to be discrete entities: action is in part creator and in part product of the institutional setting within which is it embedded (Delbridge & Edwards, 2007). A growing body of work seeks to address this shortcoming in a number of ways, including expanding conceptions of political power to include more than the formal institutions of local government, and theorizing how and when actors and actor groups are capable of strategic and reflexive action outside of the confines of their institution (Mahoney & Thelen, 2009; Streeck & Thelen, 2005). These works recognize that real world institutions are rarely internally consistent and homogeneous, that they do not always knit together neatly, and that gaps exist between the constraints imposed by institutions and the behaviours of actors (Lowndes & Roberts, 2013). Actors are recognized as not wholly constrained by the institutions in which they operate, and exercise their power through discretion and coalition building to "interpret, adapt or resist rules" (Lowndes & Roberts, 2013, pp.104-105). Actors and coalition groups may also use their discretion to act in ways that change the range of possibilities for other actors (Lowndes & Roberts, 2013).

Institutions and the rules, norms, practices and conventions they embody privilege certain actors and actions over others, and in doing so distribute power unevenly(Lowndes, 2008). The distribution of power within institutions reflects the values and rules of the institution itself. Streeck and Thelen (2005) characterize this power distribution within institutions as an arrangement of rule makers and rule takers, where rule makers create and impose institutional rules and practices and rule takers implement the rules. Discrepancies between institutional rules and action occur where rule makers are unable to oversee or enforce implementation, and where rule takers adapt or disregard rules to achieve their objectives. Capoccia (2016) elaborates on the rule maker and rule taker model by illustrating how rule makers may exercise control over institutional change through strategic agenda setting, and how rule takers exert their power through a range of actions including "gesturing" compliance, delaying action until the salience of an issue is low, adopting superficial changes or doing nothing.

Mahoney and Thelen (2009) build on Streeck and Thelan's (2005) work by theorizing the means by which rule makers and rule takers influence institutional change. Their typology and conceptual framework for understanding institutional change highlights actors' capacity for action, defined as the interaction between political context and institutional rules, which is further distilled down to two key factors: veto possibilities and discretion. The capacity of actors to influence action is theorized to be greatest for institutions that offer a high level of discretion in the interpretation and implementation of rules. Since the institutional rules set by rule makers are inevitably value laden and may also be ambiguous, rule takers may apply the rules in a way that fits with their understandings, agendas or interests. Within political contexts with high veto possibilities, however, action that is not in alignment with institutional rules can be blocked, thus constraining the types of actions available to institutional actors. Together these factors work to enable or constrain actors seeking institutional change.

Local Context

Within the various streams of new institutional theory, a number of different frameworks have been developed to explore the role of local context on institutional stability and change. Defined in this research as the geographically-specific economic, political, social and environmental conditions that define a place, local context is differentiated from institutions in that it is devoid of internal organization and represents the conditions to which institutions must adapt. For example, a local political culture that emphasizes economic development may constitute an institution, but local economic growth may be better understood as the local context in which that political institution operates. Studies within the historical institutional stream use the concepts of path dependency and critical junctures to examine the influence of local context by analyzing geographically-specific conditions and historical events that have constrained future policy choices or led to the formation of new institutions (Ghitter & Smart, 2009; Robertson, McIntosh, & Smyth, 2010; Sorensen & Hess, 2015; Wilson, 2014). Sociological institutionalists, on the other hand, have focused on the interconnections between place and identity, and highlight the role of cultural associations of space on the discourses, agenda setting and powerrationalities that influence policy and planning practice (González & Healey, 2005; Richardson & Jensen, 2003). Along these lines, Richardson and Jensen (2003) propose that spatial practices are constrained and enabled by a "cultural sociology of space", whereby symbolic and cultural meanings are attached to a physical place. Local context, including the physical characteristics and histories of a place, can help determine the symbolic and cultural meanings that are ascribed to it.

Stability and Reproduction

All variants of new institutionalism identify stability as a possible, if not defining, characteristic of institutions (Lecours, 2005; Mahoney & Thelen, 2009). Some institutions, such as constitutions and

other formal regulatory structures, are highly stable by design, in that they are developed to perpetuate particular actions and relationships over the long term (Sorensen, 2011b). Other institutions are stable not by conscious design, but inadvertently become reinforced through complementary institutions that justify their existence and increase the complexity, cost or desirability of seeking alternative institutional arrangements. Cities in particular have been theorized to be supported by a set of deeply interconnected institutions, including technology, culture, norms and processes, all of which contribute to a high level of stability, or "obduracy" of their existing physical form (Hommels, 2005b). Understanding processes that lead to institutional stability is a key area of inquiry in the new institutionalism literature because it can help provide insight into the processes that constrain social change. Within the planning and policy fields, the concept of institutional stability has been used to help explain geographic differences in policy adoption and implementation successes and failures (Fainstein, 2000; González & Healey, 2005). Identifying processes and mechanisms of institutional reproduction can highlight opportunities or areas where destabilization and change of undesirable institutions may be possible (Lowndes, 2009; Mahoney & Thelen, 2009).

The mechanisms that drive institutional stability are increasingly recognized by new institutionalists as emerging from both exogenous and endogenous factors (e.g. Capoccia, 2016). Within sociological institutionalism and some historical institutionalism frameworks, institutions are understood as spawning expectations, rules, norms and practices that "create the lenses through which actors view the world and the very categories of structure, action and thought" (Powell & DiMaggio, 1991, p.13). These endogenous processes can lead to the institutionalization of worldviews, which frame actors' perceptions of new challenges and the range of possible, appropriate solutions (Fischer, 2003). Actors are thought to be indoctrinated into the value systems that the institution embodies through a process of socialization, thereby creating a network of actors who replicate existing assumptions, understandings and, ultimately, action (Pierre et al., 2008). Such socialization can help reinforce a tendency of actors toward confirmation bias, where actors and actor groups selectively seek out and interpret only information that supports preexisting beliefs and discounts alternatives (Mercier & Landemore, 2012). Capoccia (2016) argues that institutions can create a set of social identities and ideational underpinnings, called "cultural categories", to which actors ascribe. Cultural categories can refer to race, ethnicity or gender, but can also extend to any singular facet of one's political or social identity (e.g. an "environmentalist" or a "conservative"). The cultural categories created by an institution can help to maintain its stability by obstructing reformers that challenge the institution by obliging them to frame reforms in such a way that they resonate with the social values and norms associated with espoused cultural categories (Béland, 2009; Capoccia, 2016). Reframing existing definitions and meanings requires education and awareness building, and ultimately,

"the social construction of the need to reform", which can be time consuming and resource intensive (Béland, 2009; R. H. Cox, 2001, p. 475). New ideas that are inconsistent with entrenched cultural categories are at risk of being labelled as "radical" by political opponents, which can undermine their value and give the impression that they are unfeasible (Capoccia, 2016).

Actors within institutions are motivated to conform to existing regimes to maintain familiar relationships, routines, and practices, or to avoid sanctions, uncertainty, or cognitive inconsistency associated with non-conformity (Lepoutre & Valente, 2012). Actors and actor groups responsible for policy implementation or rule enforcement, such as bureaucrats, may be motivated by reputational incentives that come with decisions that conform to existing social norms, conventions or legal precedents, in addition to motivations to maximize other preferences such as wealth and power (Capoccia, 2016). Advocacy coalitions that benefit from existing institutional arrangements can push for their protection and continuity (Filion, 2010b; Lowndes, 2009). Existing institutions gain greater political legitimacy when actors who adapt to existing rules of behaviour can not perceive alternatives to the status quo and act to further support and legitimize existing institutional arrangements (Filion, 2010b; Lecours, 2005; Lowndes, 2009). Socialization of actors can help engender a perception that existing institutions are both efficient and effective, even if the original purpose for the institution has long since disappeared (Filion, 2010b; Ghitter & Smart, 2009; Woodlief, 1997).

Exogenous factors can also support the persistence of an institution. An institution may be reinforced by other, complementary, overlapping, or mutually-supportive institutions making them more resistant to pressures for change. Cultural categories, for example, can become institutionalized through "consistent and protracted" use within a larger network of formal rules, policies, and bureaucracies, and the norms and value systems of political actors, government actors and the general public (Capoccia, 2016). External advocacy coalitions, and the level of legitimacy and familiarity they ascribe to existing institutions, may also play a role in the entrenchment of institutions, particularly where these coalitions have political influence and can block change. The political framework in which other institutions are embedded can create stability by structuring collective action and power relations and placing limits on actors and actor groups seeking change (P. A. Hall, 2009). For example, electoral rules influence the types of coalitions that can develop to reform or change institutions (P. A. Hall, 2009), while veto powers among political elites, interest groups and social movements may prevent efforts to displace or convert institutional rules (Mahoney & Thelen, 2009). Local physical context and the identities associated with a place may also lead to institutional stability where such identities are consistent with the symbolic languages and spatial practices of an institution or where they rationalize or favour certain discourses around spatial policy over others (Richardson & Jensen, 2003).

Within the historical institutionalism stream, institutional stability is further understood through a process of path dependency, whereby "the adoption of one set of institutions establishes conditions that make the adoption of others more or less likely, thereby pushing the relevant units, whether a nation, firm or other organization, along some paths that gradually foreclose others" (Hall, 2007, p.213). The narrowing of choices by the frameworks and trajectories established by previous institutions are thought to be operationalized through three key features: 1) small, seemingly insignificant events have unanticipated long term impacts, 2) such events can result in the development of particular path that becomes "locked in" through various self-reinforcing mechanisms, which limit opportunities for alternative paths, and 3) paths that are "locked-in" are assumed to remain fairly stable until exposed to a shock that destabilize them (Evenhuis, 2017). Institutions that are path dependent experience a high cost of switching to a new path due to the "inertia of sunk costs" and the range of contemplated future options becomes increasingly limited (Ghitter & Smart, 2009). The limitation of perceived future options can cause institutions to become locked-in to processes that were originally devised to resolve a need but which have subsequently become suboptimal (Woodlief, 1997). In urban planning, an additional degree of path dependency can occur because of limits that the built form places on the affordability or feasibility of alternatives (Hommels, 2005). Developments that occurred under different planning paradigms can be costly, politically unpopular and time consuming to reverse (Farris, 2001; Hesse, 2008; Vicino, 2008).

Innovation and Change

Recent scholarship on new institutionalism has increasingly focused on capacity for change as an equally important characteristic of institutions. Rather than viewing institutions as at equilibria until exposed to exogenous shocks, Streeck and Thelen (2005, p. 9) conceive institutions as "arenas of conflict" that are under constant scrutiny and contestation from actors within the institution. Without excluding the role of exogenous forces, Streeck and Thelan emphasize the role of actors in creating endogenous institutional change. Rule takers, the actors upon which formal rules are imposed, are thought to vary in their application of those rules, particularly where there is room for discretion, and may choose actions that will achieve their preferred outcomes, such as non-compliance or limited compliance, reinterpretation of rules, or coalition building to reshape the rules or outcomes (Capoccia, 2016; Streeck & Thelen, 2005). Depending on the institutional arrangement, gradual institutional change can be expected to occur through one of four processes: *displacement* of old rules with new ones, *layering* of new rules on to existing rules, *drift* or the neglect of old rules in the face of external changes, and *conversion* of existing rules to include new interpretations or applications (Streeck & Thelen, 2005).

Some literature in the sociological institutionalism stream views institutional change as a process involving the institutionalization of new ideas. Drawing on Berger's theories of social reality (1966) and

Gidden's theories of structuration (1984), scholars have theorized that new ideas or behaviours can become institutionalized through processes that include habitualization, objectification and sedimentation (Barley & Tolbert, 1997; Sánchez & Maseda, 2016). Habitualization occurs when patterns of behaviour and beliefs become routine as a result of the psychological advantage to limiting the number of available options. Objectification is the process by which behavior and beliefs take on a normative and factual quality as a result of their disassociation from the factors or events that created them. Institutions are sedimented when they are transmitted across generations.

Still other scholars conceive of institutional change as the "flip side" of stability. An institution's capacity to change can be viewed as the weakening or removal of the stabilizing characteristics of selfserving advocacy coalitions, political legitimacy, familiarity, and perceived efficiency, and the presence of a credible alternative (Filion, 2010b). Institutions whose legitimacy and efficiency are challenged by credible alternatives may lose the support of their advocates and may be more easily replaced with new institutional arrangements (Filion, 2010b). Credible alternatives can arise through a social learning process in which both policy makers and the public perceive new social problems as a result of new research, statistics, media stories or outcomes of previously enacted policies (Kingdon, 2003). Innovations and new ideas can also emerge from academics who, buffered from political and social pressures, reshape or discredit existing paradigms (Béland, 2005; P. A. Hall, 1993). Sánchez and Maseda (2016) argue that incentives and sanctions can create motivations for actors and actor groups to adopt new ideas or practices. Certain institutions, such as particular governance arrangements, are thought to be more open to new ideas and innovations (González & Healey, 2005; Moulaert, Martinelli, González, & Swyngedouw, 2007). Some scholars argue that institutional change is more likely for institutions that have a higher institutional immunity, defined as a low sensitivity to the sanctions, uncertainties and inconsistencies that pull individuals and organizations toward conformity (Greenwood and Suddaby, 2006). Buitelaar, Galle and Sorel (2011) propose that the institutionalization of new planning regulations can depend on the degree to which it is at odds with institutionalized cultures and practices of local implementing agencies.

Planning Culture

Emerging in tandem with new institutionalism, a theory of planning culture has developed to explore the framing influence of societal and professional beliefs, norms, and perceptions on action (Friedmann, 2005; Sanyal, 2005). Drawing from new institutionalism, but also from other fields of scholarship, including planning, political science, sociology and organizational theory, scholars of planning culture seek to identify and characterize the underlying reasons for differences in planning policy, implementation and spatial outcomes across geographic areas. Studies of planning culture identify

and describe geographically distinct "planning cultures", generally defined as the local planning styles and approaches that result from localized histories, political and legal traditions and related cultural norms, values, traditions and attitudes of a place (e.g. Knieling & Othengrafen, 2015; Othengrafen & Reimer, 2013; Othengrafen, 2010). The concept of planning culture has found considerable purchase in Europe, where new supra-regional vision statements and guiding spatial policies have prompted significant efforts to characterize differences in local planning cultures as a means to predict how the various regions will respond to the new governing framework (e.g. Ernste, 2012; Getimis, 2012; Jensen & Richardson, 2001; Sanyal, 2005).

Planning culture research has resulted in a number of important theoretical contributions about local differences in planning ideologies, traditions, and styles (Getimis, 2012). Conceptions of planning culture, as with new institutional theories, typically recognize that distinct practices within different geographies can result not just from the existence of particular formal institutions that guide behaviour, but also from informal structures that frame the meanings, understandings and motivations for action (Z. Taylor, 2013). Planners within local contexts have been found to share a collective ethos and attitude regarding "the appropriate role of the state, market forces and civil society in influencing social outcomes" (de Vries, 2015; Sanyal, 2005, p. XXI). They are thought to operate as a subculture nested within a broader context of actors and actor groups, such as developers, politicians, and community stakeholders. They are also embedded within a social, legal and organizational framework that operates to support or undermine the unifying features that define the local planning culture. Some scholars have described planning culture as a set of informal institutions that "guide, and are (re)produced through, decisions by government, private actors and citizens on the ends and means of planning" (Buitelaar, Galle, & Sorel, 2011, p. 930). While planning cultures may be shaped by broader actor networks and institutional forces, they can also function to redefine politics and produce new sources of power and legitimacy (Sandercock, 2005). Rather than being static, planning cultures are considered to be in constant flux, as actors adapt to changes in their socioeconomic and political context. In these ways, planning cultures operate like informal institutions and are subject to institutional processes such as social construction, reproduction and change.

A Culturalized Model of Planning

Studies examining planning culture pay considerable attention to the unifying features of the planning profession within different local contexts and broader societal frameworks. Using planning practice as the focus for comparisons across regions, planning culture scholars examine "the exact patterns of how spatial planning is practiced in different cultural, spatial, temporal and thematic contexts" (Reimer, 2013). Where transformative change is required to achieve planning agendas, planning culture

scholars, like their sociological institutionalists counterparts, seek to understand how deeply embedded, unconscious world views and cultural norms influence the more conscious, tangible and deliberate interactions, processes and products that make up planning practice (Healey, 2007; Othengrafen & Reimer, 2013).

Whereas new institutionalism theorists have focused on understanding and describing the processes of institutional stability and change and how these traits influence or are influenced by action, planning culture theorists have emphasized methodological and analytical approaches to dissect and categorize the institutions, ideologies, values, communication styles and hierarchical patterns that influence action (Getimis, 2012; Othengrafen & Reimer, 2013). One such approach, described by Othengrafen (2010, Figure 1) as a "culturalized model of planning", provides a framework to systematically examine the interactions between conscious and unconscious frames that influence planning practice. The model incorporates Scott's (2014) three pillars of institutions that reference a continuum of conscious and unconscious frames — regulative systems, normative systems and cultural-cognitive systems — into a planning context. The model, presented in Chapter 2 as a typology for categorizing barriers to implementation, uses culture as an organizing category to conceptualize planning practice within its broader institutional framework.

Drawing from the organizational theories of Schein (2017), the culturalized model of planning proposes that underlying and unconscious assumptions and perceptions at the macro-scale (societal environment) can serve to rationalize or reinforce the beliefs, norms and rules of behavior of actors and actor groups at the meso-scale (planning environment) (Othengrafen, 2010). The values and beliefs held by actors at this meso-scale "serve the normative or moral function of guiding members of the group as to how to deal with certain key situations as well as in training new members how to behave" (Schein, 2017, p. 20). The shared beliefs and practices of planners, planning agencies and other implementing actors, in turn, structure and support the types of micro-level products and outputs of planning practice (artifacts).

Achieve more focus

Artifacts

Visible planning products, structures and processes (e.g. plans, policies, incentives)

Planning Environment

Shared assumptions, values and cognitive frames of political actors, planners, and developers (e.g. planning department enforcement style, planners as market actors)

Achieve more context

Societal Environment

Underlying and unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings (e.g. autodependency, property rights)

Figure 1. Culturalized Model of Planning. Variables are distinguished by scale at which they structure planning practice. (Othengrafen, 2010).

Within the model, the artifact scale is the smallest scale and includes those outputs of planning practice that are easily recognized and understood, such as the architecture and land use(s) of a place (Othengrafen, 2010). As well, the artifact scale includes the formal products or outcomes emerging from planning practice, such as government plans, policies and regulatory structures, public infrastructure and housing investments. Artifacts are justified and rationalized by broader espoused beliefs at the planning environment scale. They may also serve to support existing cognitive frames or approaches at the planning environment scale. Artifacts are highly visible and more easily changed to adapt to new social, political or economic situations compared with the other scales of planning culture.

The planning environment scale represents a deeper, more basic set of factors that define the planning culture of a place. These factors include the shared assumptions, values and cognitive frames of planners that define how they view planning problems, and the objectives, methods and instruments they consider to solve those problems (Othengrafen, 2010). This level encompasses different scopes of

planning (plan-led vs. development- or market-led), processes of decision making (hierarchical, cooperative, or scientific) and the political, administrative, economic and organizational structures in which planners operate. Together, these factors work to influence the types and characteristics of planning products and built forms at the artifact scale. The planning environment, although less visible than artifacts, includes conscious, espoused beliefs and justifications that can be learned. As such, it is open to strategic action by actors or actor groups motivated for change. A similar, hierarchical model of planning governance developed by Healey (2007) describes this intermediate layer as the scale at which actors deliberately mobilize their biases through strategic interactions with other actors, policy agendas and discourses, and day to day routines. Following Healey, the planning environment could also include the assumptions and values and framing perspectives of all actor groups directly involved in the land development process, such as investors, developers, realtors and municipal councils, as well as the objectives and principles, processes and procedures, formalized norms and rules, and the political, administrative, economic and organizational structures that these groups use to carry out their respective roles in the land development process.

The societal environment consists of the deepest, least visible factors that influence the planning environment and artifact scales. This scale consists of unconscious, taken-for-granted societal and political values, beliefs and philosophies about the world, including conceptions about government, justice, the economy, nature, and the moral or ethical characteristics attached to them (Othengrafen, 2010). The societal scale also includes broad, formal institutions such as regulatory and legal structures that, in conjunction with societal values and beliefs, help foster certain discourses, practices, interests, networks and coalitions at the planning environment scale. These deep cultural practices and assumptions are analogous to the "cultural determinants of discourses and practices" dimension of the model proposed by Healey (2007, p. 68). Since societal environment factors serve as the most basic level of understanding, they are predicted to underpin the assumptions and value systems at the planning environment scale and justify the planning processes and plans at the artifact scale.

The culturized model of planning provides a useful and intuitive framework for analyzing local differences in planning practice and specifically plan implementation. Similar, three-tiered conceptual models or middle range theories have been used to understand social change in a wide range of fields including organizational culture (Schein, 2017), socio-technical transitions (Cohen, 2012; Geels, 2010) and planning (Healey, 2007). The model adopts a process-based, functional definition for scale rather than relying solely on geographic criteria, which is described by critical geographers as a more meaningful approach for the systematic understanding sociospatial practices (Brenner, 2001). By differentiating between broad, societal-scale institutions and more localized cultures and practices, the

model casts light on the causal factors that influence action that may be obscured by more visible, intermediary structures. The model places planning practice at the intermediate scale between societal environment and artifacts, suggesting that the shared assumptions, values and cognitive frames of various actor groups involved in the planning and land development process may play a mediating role in translating or shaping underlying institutionalized assumptions and value systems of the societal scale into supporting policies, plans and built forms at the artifact scale. By categorizing the successively less visible factors that influence practice, the model may help identify those cultural practices and social norms at the broader scales that are expected to change more slowly than factors at smaller scales because they are subconscious, implicit or perceived by actors to constitute "natural" behavior (Healey, 2007; Reimer, 2013).

Studies exploring localized differences in planning cultures have been criticized for their underdeveloped theoretical basis for explaining how planning cultures become entrenched or change across different spatial planning practices (DiGaetano & Strom, 2003; Reimer, 2013; Z. Taylor, 2013). The relatively static conception of planning culture in the culturalized model of planning, for example, hinders its ability to provide general explanations for how and why planning practices and spatial outcomes in some geographic areas are more resistant to change than others (Reimer, 2013). With its emphasis on the structuring forces that impact planning practice and outcomes, the model also provides limited conceptual clarity regarding the role of agency – the individual actors, actor networks and coalitions, power structures – on the dynamics of planning practice. Integrating the analytic framework provided by the model of planning culture with the theoretical contributions around structure, agency, stability and change provided by new institutionalism may help address these conceptual deficiencies. The following chapter explores how the two approaches may be integrated to provide a theoretical basis for exploring local differences in how spatial plans are implemented.

Synthesizing New Institutionalism and Planning Culture: A Conceptual Framework

This research adopts a conceptual framework that merges the theoretical insights of historical and sociological institutionalism with the analytical framework developed by Othengrafen to explore gaps in our understanding of the underlying reasons for local differences in growth management plan implementation. Theorists studying new institutionalism have identified a number of theoretical strengths and weakness within each of the three new institutional streams and, despite the different theoretical origins of these streams, have called for a synthesis (Alexander, 2005; P. A. Hall & Taylor, 1996; Hall, 2007). Hall (2007) argues that the different streams offer important theoretical insights into the forces that influence action, but individually may provide only a partial account of how institutions influence human

action. A synthesis of the historical and sociological streams of new institutionalism, in particular, could allow for an improved characterization of the full range of constraints, motivations and unconscious beliefs that actors face and could assist in a more nuanced understanding of the pace and direction of institutional change (Hall, 2007).

One topic area that would specifically benefit from an integration of historical and sociological institutional theory relates to the definition of institutions. In their definition of institutions as "formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy", historical institutionalists typically characterize institutions as organizations and the rules and regularized practices that are embedded within those organizations (P.A. Hall & Taylor, 1996). Institutions within this definition are fairly material, unambiguous and easily understood by relevant actors (P.A. Hall & Taylor, 1996; Hall, 2007; Lecours, 2005). While cultural factors such as ideas, norms, and value systems are sometimes considered in the historical institutionalism literature, they are largely considered to be a direct product of and separate from the material institutions that created them (Lecours, 2005). Sociological institutionalists, on the other hand, place greater emphasize on the cultural dimensions that influence action, such as symbol systems, cognitive scripts, and moral templates (P.A. Hall & Taylor, 1996) and make a clear distinction between institutions and organizations (González & Healey, 2005). The non-material, cultural factors of interest to sociological institutionalists are believed to internalize elements of the broader cultural context, and are viewed as co-constitutive and generative rather than separate from material institutions (González & Healey, 2005).

The implementation of plans, particularly those that require changes to organizational, political and cultural rules, norms and expectations, has been demonstrated in the literature to be influenced by a wide range of factors and would therefore benefit from the use of a broad definition for institution. This research draws from both historical and sociological institutionalism by defining institutions as the formal and informal procedures, routines, norms and conventions embedded in an organizational structure of a polity as well as the symbol systems, cognitive scripts, and moral templates that provide the rules, cognitive frames, meanings, understandings and motivations for action. The combined definition of institution is expected to provide a more comprehensive conceptual basis for understanding implementation than that which could be obtained through the exclusive use of a historical or sociological institutionalist definition. While the historical institutionalist definition emphasizes important organizational structures, planning processes and tools, and professional norms, the sociological definition incorporates other important but less visible factors such as values and belief systems around the role of government, the interpretation and value of nature, and what is considered "good urban form".

The different definitions of institutions influence theorists' explanations of how institutions structure action. Some historical institutionalists have adopted an understanding of action used by rational choice institutionalists, which considers actors to behave strategically within the constraints of institutions to maximize their achievement of specific preferences and goals (Hall, 2007). Within this frame, institutions provide actors with expectations and certainty around how their actions will be received and interpreted by others so that they can choose the most desirable outcome. Other historical institutionalists consider action to be further bound by cultural and historical dimensions, such as power distributions and the inherited social, economic, and political forces caused by previous events, and these factors serve to constrain the range of possible actions (Hall, 2007). Sociological institutionalists take the structuring influence of culture on action one step farther by considering institutions and action to be highly interactive and mutually-constitutive, together structuring the lens with which actors view the world and placing limits on the perception and understanding of possible options (González & Healey, 2005). Within this interpretation, "institutions influence behavior not simply by specifying what one should do, but also by specifying what one can imagine oneself doing in a given context" (P.A. Hall & Taylor, 1996, p. 948). A sociological institutionalist view defines action as not only constrained by the structuring forces of the institutions in which they operate, but also conditioned and socialized by those institutions in ways that favour the sustaining of existing identities and cultural practices (Healey, 2007; Lowndes & Roberts, 2013).

Recognizing that action is unlikely to be wholly rational and strategic, or entirely culturally-determined, this research adopts a comprehensive understanding of action that merges historical and sociological institutionalist viewpoints. A merged understanding of action enables a broad view of action as a function of external factors to which actors must strategically react (historical institutionalism), and internalized factors that influence actors' perceptions of the range of possible actions (sociological institutionalism). Theories around strategic action recognize the important contribution institutions make in helping to structure individual and collective action by providing actors with expectations around the economic, social and political costs and benefits of their actions. With its social-constructivist focus, sociological institutionalism moves beyond a static and unidirectional understanding of institutions by placing emphasis on the "cognitive processes and cultural identity, not as 'givens' – assets or attributes, but as forces and outcomes in continual social production" (Healey, 2007, p.66). The capacity of institutions to reconfigure and change is recognized by social institutionalists as requiring more than the mobilization of actors or coalitions to change the formal rules and organizational structures that bound planning practice, it also requires the transformation of deeper frames of reference and cultural practices which influence how people understand, interpret and engage with the world in which they live (Healey,

2007). The social-constructivist view of institutions is particularly apt for understanding taken-for-granted variables influencing implementation, and for distinguishing between strategic action and unconscious practices (Reimer, 2013). An understanding of deeper structuring frames and processes of social construction is important when seeking answers to the question about key driving forces that obstruct local implementation. Casting a broader conceptual net to capture the full range of influences on planning practice helps avoid the challenges associated with an overly myopic view of planning as merely the product of the legal, governmental and administrative frameworks (Getimis, 2012; Reimer & Blotevogel, 2012; Z. Taylor, 2013).

In focusing primarily on the cultural factors that impact actors' values and belief systems, however, some scholars have argued that sociological institutionalists risk overemphasizing macro-scale processes at the expense of micro- and meso-scale factors (P.A. Hall & Taylor, 1996, p. 948). Inclusion of a historical institutionalist approach that focuses on formal meso- and micro-scale structures, such as government organizations, political decision making and professional practice, would ensure a more balanced account of the full range of barriers to implementation. Taken together, the historical and sociological institutionalist definitions of institutions and their conceptions of the relationships between institutions and actors are well suited for understanding the complexities of planning practice and its transformative objectives and for understanding the driving forces that affect local implementation of growth management plans. A combined historical and sociological definition of institution also aligns well with the concept of planning as embedded within a broader planning culture comprised of artifacts, a planning environment and a societal environment. The historical institutionalist portion of the definition that encompasses formal and informal organizations, rules and procedures corresponds to the artifact scale and some aspects of the planning environment scale of planning culture. The sociological institutionalist portion of the definition that emphasizes unconscious symbol systems, cognitive scripts, and moral templates correspond to the planning environment and societal environment scales of planning culture.

A joint historical and sociological institutionalist perspective of institutions was also found to provide a suitable framework for the analysis of institutional stability and change. The combined strategic and social constructivist perspective provides a theoretical basis for understanding both exogenous and endogenous institutional change, and doesn't limit a study of change to significant historic events — a critique that has been leveled at some historical institutionalist approaches that emphasize path dependency as the main mechanism for change (Mahoney and Thelen, 2009). The merged definition of institutions allows for an understanding of implementation as a culturally-imbued practice that involves expert knowledge and choice, as well as personal biases and cultural understandings. This enables an

understanding of institutions as both a causal variable to explain action, as well as a dependent variable that can be influenced by action, and as such is expected to better reflect the nature of planning as both professional practice and a socially-constructed enterprise. The broader definition of institution is well suited for exploring the complex relationships between barriers to implementation and how they relate to one another to reinforce the status quo or create opportunities for change. A combined strategic and cultural approach to understanding the motivations for action further provides the necessary theoretical explanations for the mechanisms for stability and change outlined later in this section (See Tables 2 and 3). Conceptual imprecision associated with the view of institutions as both a dependent and independent variable (see Z. Taylor, 2013) can be offset by a clear and explicit articulation of the underlying mechanisms driving the creation of new institutions and the reproduction of old institutions.

This research also merges the definitions and theoretical foundations of historical and sociological sociological institutionalism with the conceptual framework offered by planning culture. The purpose of combining the two new institutional frameworks with planning culture was to capitalize on the analytical strengths and complementarities of each framework (

Table 1). The overlap of the frameworks is considerable, particularly when institutions are defined broadly to include the formal, informal and cultural structures. In the opinion of de Vries (2015, p. 2150) "both [new institutionalism and planning culture] refer to the durable and stable conditions shared by a community, which structures the behavior of individuals and the actions of collective actors within it" (de Vries, 2015, p. 2150). The conceptual framework offered by the culturalized model of planning provides an additional, intuitive system for examining the full range of visible and less visible barriers to growth management. This framework encompasses the barriers described in Chapter 2 and provides information on the scale at which these barriers operate. New institutionalism helps to fill the theoretical gap that has been argued to plague the culture model by adding a more dynamic dimension that includes analytical approaches to understand the underlying interactions between the barriers and resulting institutional stability or change (Reimer, 2013). The new institutional framework serves as a reductionist approach for analyzing the many possible barriers by highlighting those barriers that play an important reinforcing role in maintaining existing institutions. Casting light on those barriers that are most important in shaping existing behaviours and actions is critical for understanding why policies may fail to achieve desired outcomes.

Table 1. Comparison of Planning Culture and New Institutional Frameworks.

PLANNING CULTURE	HISTORICAL INSTITUTIONALISM	SOCIOLOGICAL INSTITUTIONALISM
Defines planning as "the collective ethos and dominant attitudes of planners regarding the appropriate role of the state, market forces and civil society in influencing social outcomes" (Sanyal, 2005, p.xxi) and where planners "produce and share cognitive frames, practices, knowledge, beliefs, norms and results, values and codes" (Orthengrafen, 2010, p.89).	Defines institutions as "the formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy" (P. A. Hall & Taylor, 1996, p. 938)	Defines institutions as "not just the formal rules, procedures or norms, but the symbol systems, cognitive scripts, and moral templates that provide the 'frames of meaning' guiding human action" (P. A. Hall & Taylor, 1996, p. 947)
Provides a organizing framework to help identify and organize a wide range of variables	Provides a theoretical framework to help characterize and evaluate mechanisms that reinforce and undermine relationships between variables, with a focus on mechanisms most likely to affect strategic action (e.g. Efficiency, Transaction Cost, Institutional complementarity, Discretion, Veto Power)	Provides a theoretical framework to help characterize and evaluate mechanisms that reinforce and undermine relationships between variables, with a focus on mechanisms most likely to affect internalized, cultural influences on action (e.g. legitimacy, familiarity, availability of credible alternatives)
Organizes variables by degree of visibility	Organizes variables by relationships	Organizes variables by relationships
Provides scalar lens for examining and understanding variables	Provides analytical tools for examining how exogenous historical, political, economic and social variables affect stability and change	Provides analytical tools for examining for examining how endogenous and socially constructed variables affect stability and change

The conceptual framework used for this research merges the hierarchical culturalized model of planning proposed by Othengrafen (2010) with the new institutional literature's conceptions of institutional stability and change, to provide a more nuanced understanding of the mechanisms and scale at which institutions and actors obstruct or enable local growth management implementation (Figure 2). The three scales of planning culture in Figure 2 are broadly defined to encompass both institutions and the actions and behaviours of individual actors or actor groups. These scales overlap with a merged historical and sociological institutionalist definition of institutions, with the sociological institutionalist definition aligning closely with the societal scale and some of the internalized cultural aspects of the planning environment scale, and the historical institutionalist definition aligning with externalized aspects of the planning environment scale and the artifact scale. The hierarchical model offers opportunities to examine plan implementation within a framework of socially-constructed hierarchies that move beyond traditional

understandings of geographic scale, such as local, regional, national and international (Getimis, 2012). In this way, the scalar model may help to highlight actor-institution networks that are more meaningful than the specific geographic scale at which they operate. As well, it helps ensure consideration of a full range of factors that influence plan implementation, and avoids what has been described by some scholars as a "a chronic overemphasis of the formal functional principles of planning systems, without broadening its scope to include the complex mechanisms inherent in planning action" (Reimer & Blotevogel, 2012, p. 8). Finally, the model may also help to highlight discrepancies or compatibilities in the institutional 'fit' between norms, beliefs and power structures at the societal scale, and policy adoption and implementation at the planning scale (de Vries, 2015).

The contextually specific meanings and conditions within different local contexts have been identified in both the planning culture and new institutionalism literatures as playing a role that can enable or limit specific planning actions (de Vries, 2015; Mahoney & Thelen, 2009). This research draws generally from the sociological institutional literature to explore the role of local context as mediating factor in the expression of barriers to answer the question: How do the key barriers to local implementation vary within different local contexts? This literature emphasizes not only the role of structure, but also power, agency and local context on institutional stability and change (e.g. Capoccia, 2016; González & Healey, 2005; Healey, 2005; Mahoney & Thelen, 2009; Streeck & Thelen, 2005). Local context is defined as the geographically-differentiated socio-cultural, political, environmental, and economic conditions to which planning practice must respond, such as a region's population and demographics, economic base, and natural (non-built) features. Contextual factors may work to enable or constrain reflexive and strategic decision making and influence the adaptation of existing institutions to new rules. Local context, which is not encapsulated in the Othengrafen's model, is depicted in Figure 2 as an exogenous variable that shapes the factors that make up the hierarchy of planning culture.

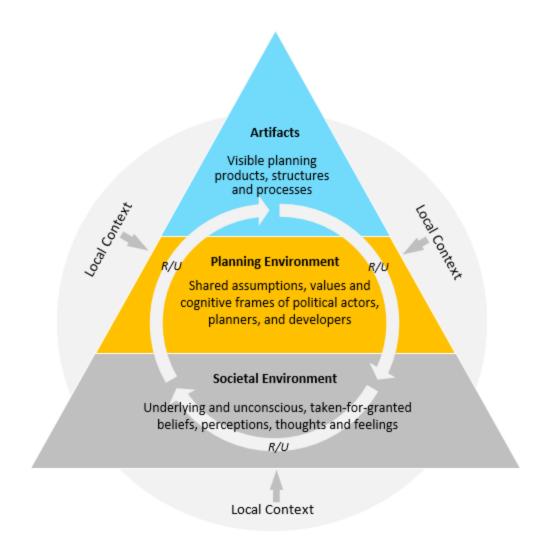


Figure 2. Modified Culturalized Planning Model (Adapted from: Othengrafen, 2010). R/U refers to reinforcing or undermining mechanisms that promote institutional stability and change, as outlined in Tables 2 and 3.

Recognizing the sociological institutionalist conception of actors as both the products, creators and sustainers of their institutional environments, the model in Figure 2 has been revised to identify the possibility that factors within the three hierarchies of planning culture may work to either reinforce or undermine factors within the same scale or across scales. The mechanisms by which factors at the different scales interact, and which are identified in Tables 2 and 3, are referenced in the model as R/U (Reinforcing/Undermining). For the purpose of this research, mechanisms are defined as the "underlying entities, processes or structures which operate in particular contexts to generate outcomes of interest" (Astbury & Leeuw, 2010, p. 368). This definition recognizes that mechanisms are moderating variables

that tend to be both hidden and sensitive to context, such as belief-formation or the exercise of power and interest, which result in particular actions, habits and patterns of behavior (Astbury & Leeuw, 2010). Mechanisms are not viewed as wholly separate or exogenous from institutions, but rather relate to processes, structures and actions that intervene between or within institutions to create patterns of institutional reproduction or change.

Drawing from the theoretical literature, with particular reference to Mahoney and Thelan (2009), Filion (2010b), and Taylor (2013), Table 2 summarizes the mechanisms that are theorized to cause the reproduction of existing institutions (Referenced as *R* in Figure 2). Institutions may be supported by any number of stabilizing mechanisms, and the mechanisms may vary in terms of their applicability and magnitude. Filion (2010b) notes that by definition, the mechanism of familiarity is a universal factor that cannot be directly compromised or undermined, and therefore must be overcome or offset through direct action (e.g. introduction of disincentives or sanctions) or through the destabilization of the other mechanisms. Strategic action through discretion and veto power can reinforce existing institutions but it can also provide opportunities for the establishment of new institutions.

Table 2. Causal Mechanisms for Institutional Stability and Reproduction (Filion, 2010b; Mahoney & Thelen, 2009; Z. Taylor, 2013).

MECHANISMS FOR REPRODUCTION	DESCRIPTION
Efficiency	Institutional arrangement provides economic benefits and/or meet performance expectations
Legitimacy	Institution is legally or morally sanctioned, comprehensible, recognizable, and/or culturally supported
Familiarity	Institution becomes routine and offers advantages of reducing complexity and risk in decision making
Serves Interests of Advocacy Coalitions	Institution is supported by advocacy coalitions who benefit from its continuation
Transaction Cost	High cost or complexity to change from one institutional framework to another. Cost may be monetary or non monetary (e.g. social or political).
Institutional complementarity	The degree to which institution is related to and mutually supported by other institutions
Absence of credible or available alternatives	Institution is not challenged by new research or innovation. Alternatives are not perceived, or not available due to a narrowing of available options (path dependency)
Confirmation bias	The tendency of actors and actor groups to seek, interpret and emphasize information that supports or defends initial intuitions and beliefs
Discretion	Extent to which actors internal to an institution ("rule takers") can exercise discretion to adapt or modify rules imposed by "rule makers"
Veto Power	Extent to which actors external to an institution ("rule makers") can block or regulate action by implementers or "rule takers"

Institutions represent a particular distribution of resources and set of compromises that favour certain groups over others. Transformative change can arise where supporting institutions represent imperfect compromises and/or an unequal distribution of resources which creates openings and incentives for the introduction of new ideas and practices (Mahoney & Thelen, 2009). Table 3 summarizes the factors identified in the theoretical literature that can lead to institutional change, with particular reference to Béland (2009) and Mahoney and Thelan (2009) (Referenced as U in Figure 2). Ideas and changing conditions can be introduced through processes of social learning, in which implementing actors perceive new social problems as a result of new information about current conditions, policy outcomes or alternative approaches (Kingdon, 1995). Ideas can also be introduced in the form of policy alternatives proposed by academics who, buffered from political and social pressures, can help reshape or discredit existing worldviews and policy paradigms (Beland, 2005; Hall, 1993). Changing social, political or economic conditions can redistribute power and resources in ways that advantage new actor groups who seek to make changes in their favour. Incentives and sanctions can undermine the perception of efficiency and legitimacy of a particular institutional arrangement and lower the transaction costs associated with alternatives. The ongoing or mounting distributional effects of an institution over time can lead to

divisions amongst institutional elites or disadvantaged subordinate groups, leading to their mobilization for change (Mahoney & Thelen, 2009).

For Mahoney and Thelan (2009), the meaning and interpretation of institutional rules are the subject of considerable and ongoing internal debate and contestation. In their view, "compliance is inherently complicated by the fact that rules can never be precise enough to cover the complexities of all possible real-world situations" (Mahoney & Thelen, 2009, p. 11). Variability in how institutional rules and expectations are interpreted can lead to openings for actors and coalitions that favour particular interpretations. Where an institution permits discretion in the application or enforcement of rules, actors can diverge from or adapt those rules to meet their needs, interests or preferences. Complete divergence from rules can occur when the powerful actors internal or external to an institution have limited veto powers to block change. Subtle or modest change, on the other hand, can occur in situations where institutions are subject to high veto possibilities. In these cases, institutional rules can be adapted through the overlay or attachment of new rules to existing rules, or left to become obsolete.

Table 3. Factors Promoting Institutional Change (Béland, 2009).

FACTORS PROMOTING CHANGE	DESCRIPTION
Ideas	New information or ideas challenge perception of legitimacy or efficiency of existing institutional arrangements
Changing Conditions	New problems emerge that render existing institutions ineffective
Incentives/Sanctions	New ideas or practices gain legitimacy as a result of incentives or sanctions.
Serves Interests of Advocacy Coalitions	New institutions that benefit powerful interest groups are promoted and adopted
Discretion	Extent to which actors internal to an institution ("rule takers") can exercise discretion to adapt or modify rules imposed by "rule makers"
Veto Power	Extent to which actors external to an institution ("rule makers") can block or regulate action by implementers or "rule takers"

Modeling Key Barriers

The model in Figure 2 draws on both the theoretical contributions of historical and sociological institutionalism, and the analytical contributions of the culturalized model of planning to provide a framework with which to examine the key barriers to growth management plan implementation. The framework depicts barriers to implementation as a set of factors that are in constant interaction with each other and their local context through the mechanisms described in Tables 2 and 3. When populated with specific barriers identified in the literature, the model establishes a set of expected barriers to growth

management against which field results can be tested. This section describes how the framework may be used as a tool to understand the key driving forces that obstruct local implementation of growth management plans. In addition, it presents a more detailed, relational model to depict how barriers to implementation may reinforce each other to obstruct growth management efforts and support low density urban forms.

Using the barriers to growth management identified in the literature (Chapter 2) and the conceptual framework outlined in Figure 2, Table 4 summarizes the key barriers to regional growth management implementation across the three scales of planning culture. This basic framework reveals a total of 10 general classes of barriers within which 31 specific barriers were identified or theorized in the literature to impact the implementation of growth management plans. Figure 3 incorporates the barriers into the culturized planning model, with barriers at the artifact scale nested within planning scale barriers, which are in turn nested within broader, societal scale barriers. Reinforcing or undermining relationships between barriers are depicted as flowing either from the societal environment scale through the planning environment scale to the artifact scale, or conversely, from the artifact scale through the planning environment scale to the societal environment scale. Local context is depicted as influencing the expression of barriers at all scales.

The potential reinforcing relationships between barriers at various scales and the institutions within which they are embedded are further explored through a more nuanced and detailed model in Figure 4. This more detailed model was necessary to capture the relationships between barriers across and within scales which proved to be too complex to depict using the culturalized model of planning alone. By breaking apart the nested categories of planning culture into their individual components, the model depicts with greater detail the direction and nature of the relationships between barriers within and between the scales of planning culture. Direct positive feedback loops can be discerned where two barriers are connected by multi-directional (two headed) arrows, while longer feedback loops are identified through circular loops that connect more than two barriers. The model serves as an inset to the more generalized hierarchy in Figure 3 and is therefore subject to the influence of local contextual factors. The model illustrates that the relationships between barriers at different scales may not always be nested, as depicted by the model of planning culture (Figure 3). Barriers considered to operate primarily at the societal scale, for example, may reinforce other barriers at the societal scale. In other cases, direct relationships may occur between barriers at the societal and artifact scale.

Figure 4 also creates a focus for analysis that is absent from the culturalized planning model. It does this by placing low density urban form at the centre of a complex network of barriers that variously interact across the three scales of planning culture. The model treats low density urban form as a key

artifact that is heavily reinforced by barriers within the broader planning culture and also highlights the structuring role of low density urban form in reinforcing those barriers through a series of positive feedback loops.

The model in Figure 4 further recognizes that barriers to growth management operate within broader institutional frameworks that do not align with the scales of planning culture identified in Figure 3. The detailed breakdown of individual barriers identified in the literature reveals that barriers coalesce into three broad socio-cultural, political and economic themes, represented as the dotted lines in Figure 4. These themes are considered to comprise the general institutional setting within which barriers operate, and include: 1) Land and Property Markets, 2) Place Identity and 3) Urban Governance. The institutions and their component barriers are conceived as broad social arrangements comprised of rules, norms, practices, beliefs and ideologies, which create the logics and motivations for action. The institutions encompass, and treat equally the formal and informal institutions identified in historical institutionalism's definition of institutions, and the cultural aspects of institutions from the sociological institutionalist definition. Land and property markets comprise a range of structuring forces and actors/actor groups that help define dynamics of the property development industry including land use policies, development fees and charges, land prices, supply and demand, and development industry practices. Place identity refers to interactions among structuring forces, actors/actor groups and the physical environment that help to create and sustain place attachment, a sense of belonging and personal identity. Last of all, urban governance represents the suite of agencies, organizations and stakeholder groups and their respective resources, political interests, and power distributions, that guide the planning, management and financing of urban areas. Institutions are depicted with a dotted line in recognition that the boundaries are relatively fluid and can encompass components of other barriers.

The institutional themes provide added value to the model by highlighting important arenas of interaction between barriers that could not be demonstrated through the classification of barriers by scale. Whereas grouping barriers according to scale can facilitate the identification of a broad range of visible and invisible barrier types, the grouping of barriers according to institutional themes offers a framework for exploring and understanding the interconnections between barriers. In placing conceptual boundaries around individual barriers that share or reinforce broader institutional logics and objectives, the themes are anticipated to help in later analysis and sense making regarding how barriers work collectively to enable to constrain action. Highlighting broader institutional themes based on patterns of relationships between barriers is further intended to prevent an overly reductionist approach in the analysis of individual barriers by ensuring that they are examined within their broader institutional context.

Underlying the model in Figure 4 are a number of assumptions that influence how the barriers and their interrelationships are depicted. First, the model recognizes that low density urban form is a central factor for understanding implementation, as it is both a barrier to implementation and also the outcome of failed efforts to manage urban growth. Because of its pivotal role as a measurable outcome of absent or unsuccessful growth management, low density urban form serves as a centralizing feature in the model to which all other barriers are directly or indirectly related. This focal point recognizes and emphasizes the important legacy of past urban forms and the constraints these forms have on future land use and development patterns (Conzen, 2004; Hommels, 2005a; Hommels, 2005b).

Second, given the resistance to change of prevailing low density urban forms and the institutions that support them, as demonstrated in the literature, the model assumes that the barriers to growth management and their broader institutional milieu benefit from a certain degree of stability. The model is organized to explore the factors that lead to this stability by focusing on the reinforcing relationships that may contribute to the enduring presence of low density urban forms. In this way the model serves as a tool to explore the mechanisms that support the stability of barriers (Table 2) within their institutional settings, with particular emphasis on the relationships between broader, underlying factors and those that are more visible. Although relative stability is conceived as a defining characteristic of the institutions and component barriers that support low density urban forms, this characteristic is understood as being under constant scrutiny and/or challenge that may lead to the destabilization of these relationships, as described in Table 3. In local contexts where barriers are fewer in number and/or reinforcing relationships appear weak, the model serves as a backdrop against which the mechanisms that promote institutional change, including ideas, changes to external conditions, incentives/sanctions, interests, discretion, and veto powers, can be explored.

Table 4. Barriers to Implementation of Regional Growth Management Plans.

BARRIER TYPE	BARRIER		
ARTIFACTS			
LOCAL PLANS AND	Weak or unimplementable municipal plans/policies		
POLICIES	Unsupportive engineering and planning standards/policies		
	Inaccurate price signals that subsidize low density development		
	Official Plan does not conform to Growth Plan		
FEDERAL AND PROVINCIAL	Incompatible provincial decision making, policy and investment		
PLANS AND POLICIES	meempastore provincial accision making, poncy and investment		
BUILT ENVIRONMENT	Existing low density urban form		
	High cost and complexity to retrofit built form		
PLANNING ENVIRONMENT			
CHARACTERISTICS OF	Lack of political will		
IMPLEMENTING AGENCY	Lack of staff commitment to growth management objectives		
	Staff view high density development as incompatible to local character		
	Inconsistent or weak enforcement		
	Lack of communication and awareness-building with developers		
	Insufficient planning capacity		
	Inefficient or inconsistent administration		
	Staff view their role as dependent on the market		
	Municipalities seek land uses that produce the greatest tax revenue while		
	utilizing the fewest services		
CHARACTERISTICS OF	Development industry not committed to growth management objectives		
DEVELOPERS	Insufficient experience or knowledge to build alternatives		
INTER-ORGANIZATION	Poor coordination and level of engagement between local and upper tier		
RELATIONS	government agencies		
	Weak or absent regional coordination of local planning		
	Inter-municipal competition for development		
SOCIETAL ENVIRONMENT			
PROPERTY OWNERSHIP AND	Presence of strong NIMBY lobbying against infill and intensification		
RIGHTS ADVOCACY	Belief in and advocacy for minimal public regulation of private property and		
	the valuing of private over public spaces		
CONSUMER PREFERENCES	Consumer preference for low density suburban form		
	Auto dependency and absence of alternative travel options		
GROWTH IMPERATIVE	Presence of a strong conventional growth coalition that seeks economic		
	development over growth management		
	Absence of dissenting voices in favour of growth management		
MARKET DISTORTIONS AND	Societal costs of development and car transportation not reflected in market		
NEOLIBERALISM	pricing		
	Belief in the superiority of market-based solutions and constraints on		
	government efforts to correct market distortions		
	Privatization and deregulation vs. capacity of local government to plan for		
	and regulate development		
	Decentralization of planning authority vs. regional coordination		

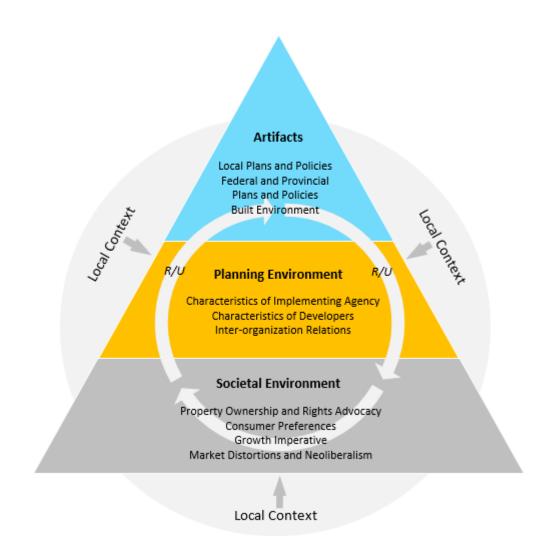


Figure 3. Culturalized Planning Model of Barriers to Growth Management. (Adapted from: Othengrafen, 2010). R/U refers to reinforcing or undermining mechanisms that promote institutional stability and change.

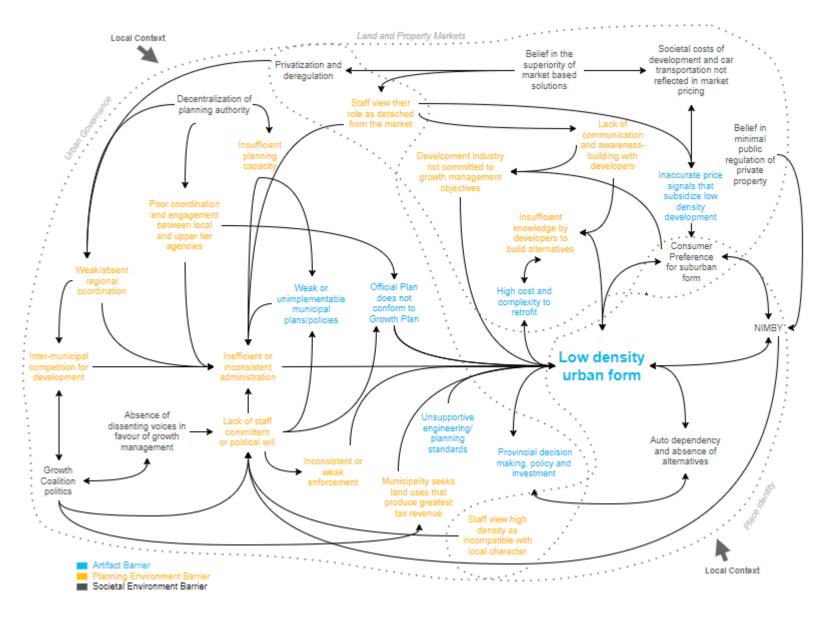


Figure 4. Detailed Barriers to Growth Management Implementation and Predicated Reinforcing Inter-relationships.

Directional arrows denote positive or reinforcing relationship. Dotted line depicts general socio-cultural, political or economic institution in which barriers are embedded

Artifacts

Artifacts are the tangible and debated products of the planning system that are both visible and easy to measure. They include urban structures, land uses, plans, processes, and organizational arrangements. The tangible nature of artifacts, particularly when compared with underlying social and behavioural norms that make up planning and societal environments, makes them the main focus of municipal growth management efforts and empirical studies of growth management planning. Key artifacts credited in the literature with obstructing growth management were found to relate primarily to local, provincial and federal plans and policies and the built environment. Specific barriers at the artifact level, as described in the literature, were:

- 1. Weak or unimplementable municipal plans/policies
- 2. Unsupportive engineering and planning standards/policies
- 3. Inaccurate price signals that subsidize low density development
- 4. Official Plan that does not conform to the Growth Plan
- 5. Incompatible provincial decision making, policy and investment
- 6. Existing low density urban form
- 7. High cost and complexity to retrofit built form

Figure 3 depicts artifacts as both the products of the broader planning environment, and as reinforcing factors that help to justify or normalize underlying planning scale barriers. Figure 4 further suggests that direct relationships may occur between barriers at the artifact and societal environment scales, as well as between barriers within the same artifact scale. The degree to which barriers at the artifact scale are resistant to change is expected to be a function of the nature and complexity of reinforcing or undermining relationships with other barriers, as defined by the mechanisms outlined in Tables 2 and 3. Greater stability of artifacts is expected when they are aligned with the framing logics, understandings, assumptions and values of the broader planning and societal environments in which they are embedded. Artifacts and their supporting planning and societal environment organize according to common socio-cultural, political or economic institutions, as depicted by the dotted lines in Figure 4.

As both a barrier to growth management and a key outcome of unsuccessful growth management, low density urban form serves as a central feature of the relational model in Figure 4 to which many other barriers relate. Low density urban form shares direct relationships with the largest number of barriers (12) from all three scales of planning culture, ranking it high in terms of institutional complementarity. At the bottom right of Figure 4, six barriers are depicted within three circular networks around low density urban form. These barriers share mutually reinforcing relationships with low density urban form through a

system of positive returns, where increases in one barrier directly lead to increases in the other and vice versa (depicted with two-headed arrows). For example, the sunk costs and support by advocacy coalitions associated with low density urban form is predicted to increase the cost and complexity of infill development and limit the feasibility of alternatives and the number of developers capable or willing to provide alternatives, thus leading to a continued supply of low density urban forms. Provincial investment in highway development supports continued development of low density urban forms through the creation of efficient and convenient travel networks for suburban home owners and businesses. The existence of low density urban form in turn supports a cultural environment in which car travel becomes familiar, and is perceived as cost effective and efficient, thus leading to support and political pressure from advocacy coalitions for continued investment in highway upgrades and expansions.

Local context is expected to influence the stability of artifacts, by directly supporting or challenging the feasibility or appropriateness of the artifacts themselves, or the connected barriers that serve to reinforce them. For example, local economic conditions could directly challenge the feasibility of planning artifacts that create financial incentives for intensification, such as brownfield redevelopment grants. Alternatively, local context may interact indirectly with barriers at the artifact scale by influencing the institutional logics underpinning connected barriers at broader scales. For example, a declining local economy may challenge the perceived efficiency, legitimacy and credibility of growth management objectives and increase support for growth coalitions, which in turn can reduce the level of political support for growth management interventions and the type and quality of local policies adopted.

Changes to local context can also alter power dynamics as well as the distribution and availability of resources, giving rise to opportunities for individuals and coalition groups to challenge barriers at the artifact scale. Changing socio-cultural conditions, economic factors and demographics can lead to new advocacy coalitions that contest the legitimacy and efficiency of suburban development, and generate consumer pressure for more affordable, centrally located urban forms. Increased consumer acceptance of compact, rental and condominium dwelling units could help reduce NIMBY responses to infill development by increasing the familiarity of compact urban forms and reducing the concerns about the implications of infill and compact development on property values.

Planning Environment

Barriers at the planning environment scale are those that frame the understandings, assumptions and values of politicians, municipal planners, developers and the resulting planning or development practices and organizational structures in which they interact. Characteristics of the implementing agency and developers were identified in the literature as key planning environment factors within which specific

barriers operated. Operating within these broader categories, the following 14 specific barriers to growth management were identified:

- 1. Lack of political will
- 2. Lack of staff commitment to growth management objectives
- 3. Staff view high density development as incompatible to local character
- 4. Inconsistent or weak enforcement
- 5. Lack of communication and awareness-building with developers
- 6. Insufficient planning capacity
- 7. Inefficient or inconsistent administration
- 8. Staff who view their role as dependent on the market
- 9. Municipalities seek land uses that produce the greatest tax revenue while utilizing the fewest services
- 10. Development industry not committed to growth management objectives
- 11. Insufficient experience or knowledge to build alternatives
- 12. Poor coordination and level of engagement between local and upper tier government agencies
- 13. Weak or absent regional coordination of local planning
- 14. Inter-municipal competition for development

The models in Figure 3 and 4 depict how barriers at the planning environment scale are expected to relate to barriers from other scales. The relationships between barriers in Figure 4 reveal that in most cases, planning environment factors play an intermediary role in shaping how broader societal environment barriers are interpreted, understood and translated into artifacts. This effect is predicted by Kneiling and Othengrafen (2015, p 2136), who describe planning environment factors as "the conscious beliefs and values that predict much of the behaviour that can be observed at the artefact level". However, the model also reveals that planning environment barriers do not always play a connecting role between broader societal factors and artifacts. For example, as a societal scale barrier, NIMBY can influence political will at the planning environment scale through a variety of mechanisms such as advocacy coalitions and cultural sanctions that support NIMBY. However, NIMBY may also directly support low density urban form through cultural sanctions and by increasing transaction costs required to switch to alternative development forms.

Local municipalities that operate within shared regional planning, administrative, and legal frameworks, such as planning subregions, provinces, states, or even multi-nation frameworks such as the

European Union, are expected to share more similar planning environments compared with those operating within divergent frameworks. However, even within shared governance and planning systems, scholars have noted differences in how those broader frameworks are interpreted and acted upon (de Vries, 2015; Levin-Keitel, 2014). Differences within regions that share similar legal and administrative planning frameworks have been attributed to differences in the cultures and capacities of the organizations responsible for implementing land use planning.

Barriers at the planning environment scale are expected to be more responsive to local context where they represent imperfect solutions or negotiated interpretations of the institutional logics that underpin societal environment barriers. In such cases, actors and actor groups may use discretion to adapt organizational rules to achieve their goals, or they may be more receptive to social learning in response to new information, ideas and alternative approaches. As with artifacts, local context may directly support or challenge planning environment barriers, or any of the connected barriers that serve to reinforce them. Inmigration patterns that transform rural settlements to urban centres, for example, may challenge the appropriateness or feasibility of long held planning perspectives that value the preservation of local rural character, thereby creating opportunities for alternative ideas on appropriate urban forms or new discretionary interpretations of existing planning policies.

Societal Environment

The societal environment provides a rationale or justification for beliefs, processes and tangible policies and actions further up the hierarchy of planning culture. Property ownership and rights advocacy, consumer preferences, market distortions and neoliberalism and a growth imperative were identified in the literature as the key societal environment factors that may obstruct local implementation of growth management policies. A total of ten specific societal environment barriers to growth management were identified from a review of the literature:

- 1. Presence of strong NIMBY lobbying against infill and intensification
- 2. Belief in and advocacy for minimal public regulation of private property and the value private over public spaces
- 3. Consumer preference for low density suburban form
- 4. Auto dependency and absence of alternative travel options
- 5. Societal costs of development and car transportation not reflected in market pricing
- 6. Belief in the superiority of market-based solutions that constrain government efforts to correct market distortions

- 7. Privatization and deregulation that reduce capacity of local government to plan for and regulate development
- 8. Decentralization of planning authority that reduces regional coordination
- 9. Presence of a strong growth coalition that seeks conventional economic growth over growth management
- 10. Absence of dissenting voices in favour of growth management

Societal barriers comprise the taken-for-granted, underlying assumptions of a society and define how people interpret and react to the world around them (Knieling & Othengrafen, 2015). Figure 4 depicts most societal barriers to be at or close to the beginning of each relationship chain, where they operate to justify other societal or planning environment barriers and occasionally artifacts. In a few cases, the conditions created by artifacts and planning environments also work directly to reinforce societal scale barriers. The existence of low density urban forms, for example, directly justifies auto dependency through the perception that car travel is superior in performance and lower cost when compared with other travel options. The familiarity and performance of car travel in turn helps to reinforce continued creation of low density urban forms. Opportunities for innovation and change at the societal environment scale are anticipated to share commonalities with the planning environment, in which transformation is a result of social learning in response to new information or perceptions about social problems, current conditions and alternatives.

Studies of the cultural factors that influence planning have found societal environments, and the resulting planning environments and artifacts, to vary significantly between case studies (Knieling & Othengrafen, 2015; Othengrafen & Reimer, 2013; Othengrafen, 2010). These studies have examined planning cultures in Europe, a geopolitical region that spans multiple political boundaries and contains a diverse range of socio-political cultures. Knieling and Othengrafen (2015) identified four key societal factors that influence the variability in planning cultures across nations: (1) prevailing socio-economic worldviews, and (2) societal values such as those that emphasize individual vs. communal rights, (3) orientation toward time (e.g. values with respect to the relative importance of the past, present and future), and (4) values and conceptions of nature. Societal environments that operate within a shared federal and regional scale political and economic framework are expected to be more uniform than those that span nations or distinct geopolitical regions. Case studies within single geo-political regions may demonstrate variability in societal environment barriers across certain socio economic or socio-political divides, such as the urban and rural (Segaert, 2008). As well, societal environments within regions may demonstrate variability in the power and influence of certain societal worldviews.

The societal scale barriers identified in this research and the institutional settings in which they are embedded emphasize the importance of three of Knieling and Othengrafen's (2015) four general societal characteristics: (1) prevailing socio-economic worldviews, (2) societal values such as those that emphasize individual vs. communal rights, and (3) values and conceptions of nature. To a lesser extent, the societal environment barriers to growth management reflect the fourth characteristic: an orientation toward time (e.g. values with respect to the relative importance of the past, present and future).

Applying the Models

Figures 3 and 4 depict the barriers to growth management planning as a complex web of interconnected individual and collective behaviours, beliefs, policies and practices, operating at a range of scales and influenced by broader local social, economic and political contexts. The model in Figure 3 illustrates the generalized relationships between barriers at different scales within a local context, while Figure 4 provides a more detailed model of the interdependencies between barriers and highlights where barrier groupings fall into general institutional themes. With its more detailed depiction of interrelationships and institutional themes, Figure 4 serves as a model against which barriers reported in specific local contexts may be compared and tested. Stable barriers are those that are positively reinforced by other barriers or local context through the dynamics described in Table 2. Less stable barriers are considered to be those that don't benefit from positive reinforcement of other barriers or local contextual factors, leading to conflicting internal logics or compromises between specific advocacy coalitions. These barriers are expected to be more vulnerable to changes through the mechanisms described in Table 3.

Together, the models comprise a set of practical tools for analyzing and comparing local variability in barriers to growth management. The model in Figure 3 offers a framework for systematically identifying the full range of barriers that may impact planning action. By identifying the three scales of planning culture at the outset, the framework helps override disciplinary boundaries and provides a sensitizing approach for identifying less visible values and assumptions that may constrain or enable particular planning actions (Othengrafen, 2013). For example, the framework moves beyond rational planning assumptions that view planning as the exclusive domain of civil servants and politicians by ensuring consideration of other actors, actor groups and structuring forces that fall outside of traditional planning organizations (Reimer, 2013). The model presented in Figure 4 extends the value of the planning culture framework by providing a depiction of known or theorized reinforcing relationships between barriers that can be examined and compared across regions. In addition to providing a systematic basis for defining and comparing relationships between barriers in different local contexts, the model identifies broader institutional themes within which interconnected barriers can be analyzed and interpreted. In combination with the mechanisms for change described in Tables 2 and 3, the model in

Figure 4 provides an analytical framework for examining local planning cultures that avoids static conceptions of planning and recognized the dynamic interplay of variables that help to constrain or enable action. By considering mechanisms for change that acknowledge both structuring forces (e.g. familiarity and legitimacy) and agency (e.g. discretion and veto power), the model helps avoid an overly structural view of institutions and recognizes the role of deliberate or strategic action in blocking or enabling institutional change.

The models enable a number of predictions about local variability in growth management implementation. Regions demonstrating a larger and more complex network of self-reinforcing barriers to growth management are anticipated to be less likely to implement transformative planning approaches that support more compact, transit supportive development than regions demonstrating fewer barriers and/or smaller and weaker networks. Local social, economic and environmental conditions are anticipated to influence the expression and stability of key barriers within different regions. The scale at which barriers operate is also expected to influence their relative stability and impact. Societal scale barriers are anticipated to demonstrate a high level of stability compared with barriers at the planning environment and artifact scales because they represent less visible, unquestioned values and beliefs that are more vulnerable than other scales to self-reinforcing mechanisms such as confirmation bias.

Chapter 4. Methods

Research Objectives

This research explores the reasons for the apparent mismatch between growth management planning goals and the urban development reality by examining barriers to the implementation of a regional growth management plan. The objective of the research is to identify key barriers to municipal implementation of growth management plans and explore the relationship between those barriers and the local context. Recognizing that barriers to growth management plan implementation within different municipalities are unlikely to operate in isolation, this research explores how local context influences the way barriers are expressed, reinforced and/transformed. In meeting this objective, this research aims to answer the questions:

- 1) What are the key barriers to local implementation of regional growth management plans?
- 2) Are barriers archetypical or are they unique to the local context?
- 3) How do the barriers to implementation relate to one another, and what are the mediating mechanisms that define these relationships?
- 4) How do barriers interact to reinforce the status quo? Where are there opportunities for change?

The Growth Plan for the Greater Golden Horseshoe, a Provincial plan guiding planning decisions for a region centering on Toronto, Canada, is the focal point for this study. A mixed method, multi-step methodological approach was used to identify, interpret, contrast and compare the barriers to implementation facing three case study municipalities within the Greater Golden Horseshoe against a model of expected barriers to implementation derived from the literature (Chapter 3). To identify and characterize the barriers to implementation within each of the case study regions, the research draws on three main data sources:

- 1) Interviews with implementers to gain insights from their practical experiences, with emphasis on municipal planners, but also including provincial planners, planning consultants and developers in the case study municipalities;
- Supplementary documents that examine local planning issues and practice, including municipal
 and provincial planning documents, correspondence, media reports and independent and academic
 research; and,

3) Statistics Canada community profile data (2011) and background municipal planning documents to obtain descriptive statistics and contextual information for each case study region, including population, employment, growth rate, urban form, and socio-political context.

Comparative models

A key objective of this research is to examine if and how barriers to growth management implementation differ within different local contexts. To compare barriers across different contexts, a generic representation of barriers is developed and used as a model against which case study results are compared. The model, presented in Figure 4, draws from both the conceptual and organizational contributions of the planning culture framework and the theoretical and analytical contributions of historical and sociological institutionalism. The rationale for integrating these frameworks was to benefit from their individual strengths and contributions, namely: 1) The strength of the planning culture model's organizing framework which helped identify the full range of identified and possible barriers described in the literature (Chapter 2), 2) the reductionist approaches offered by each framework for synthesizing a large number of variables into meaningful groups based on scale and patterns of interaction, and 3) the analytical contribution of historical and sociological institutionalism, which provides a basis for analyzing the relationships between barriers, identifying important patterns of interaction, and understanding how those relationships make them resistant or vulnerable to change.

The case study models are used to illustrate key barriers to Growth Plan implementation in each region and their divergence from the generic model and from each other. The models are used to highlight important patterns of interaction between key barriers, the scale at which key barriers operate and the institutional themes within which they fall for each case study region. These characteristics highlighted by the model form the basis of further analysis and discussion of the research questions. The models are expected to enable a more fulsome identification of the barriers to growth management, and to provide a better understanding of the complex and dynamic interrelationships between barriers within different local contexts.

Case study selection

Because of the many municipalities in the Greater Golden Horseshoe, a case study approach was used to gather detail rich data on a subset of the municipalities. Case studies were selected using a purposeful, maximum variation (heterogeneity) approach, which is a recommended approach for small samples where there is a large degree of variation between individual cases (Patton 2002). The rationale for using this sampling approach was to maximize variation so as to capture similarities, central themes

and shared patterns of policy implementation among the disparate regions as well as to capture distinct policy implementation challenges that are unique to each region.

Case study municipalities within the Greater Golden Horseshoe were selected from among the 16 upper tier municipalities whose boundaries fell inside the Greater Golden Horseshoe. The boundaries of upper tier municipalities were chosen as the geographical unit of analysis since urban planning decisions of lower tier or single tier municipalities within those boundaries can be greatly impacted by decision making and policy frameworks at the upper tier. Case study selection was further restricted to include only those regions located predominantly or entirely outside of a protected Greenbelt that surrounds Toronto to ensure all case studies operated within the same Provincial policy environment, development conditions and growth management opportunities. Regions were further restricted to those considered to be self-sustaining urban areas with at least one traditional downtown, and those that had an availability of greenfields for development and opportunities for intensification.

Of the seven upper tier municipalities located predominantly or entirely outside of the Greenbelt, the three case studies regions – Peterborough County, Simcoe County, and the Region of Waterloo - were selected. These regions were selected because they represented different social, environment and economic contexts that could result in different constraints on Growth Plan implementation. Thus they represented three considerably different regions that may have different approaches to managing urban growth, despite sharing the same Provincial policy planning framework. Specifically, the three regions varied across a number of characteristics expected to influence Growth Plan implementation, including degree of urbanization and dispersion, population size, and rate of urban growth (Table 5).

Table 5. Characteristics of Case Study Areas.

CASE STUDY AREA	POPULATION	NO. URBAN GROWTH CENTRES	PERCENT RURAL/SMALL TOWN*	POPULATION GROWTH RATE (2006-2011)
PETERBOROUGH	171,440	1	12	1.5
SIMCOE	436,630	1	45	5.5
WATERLOO	507,096	3	6	6.1

^{*}Calculated as a proportion of Census division located outside of a Census Metropolitan Area (Source: Rural Ontario Institute. (2013). Overview of Ontario's Rural Geography. URL: http://www.ruralOntarioinstitute.ca/file.aspx?id=1c38f15e-df4e-41a8-9c4d-7ad02cf55b0b)

Within the boundaries of the upper tier municipalities, all lower tier and single tier municipalities were identified and grouped with their associated upper tier municipality to form case study regions (Table 6).

Table 6. Case Study Areas and Associated Lower and Single Tier Municipalities.

CASE STUDY AREA	NAME	MUNICIPAL CLASSIFICATION	MUNICIPAL STATUS
PETERBOROUGH	Peterborough	County	Upper Tier Municipality
Population*: 171,440	Peterborough	City	Single Tier Municipality
	Asphodel-Norwood	Township	Lower Tier Municipality
	Cavan Monaghan	Township	Lower Tier Municipality
	Douro-Dummer	Township	Lower Tier Municipality
	Galway-Cavendish & Harvey	Township	Lower Tier Municipality
	Havelock-Belmont-Methuen	Township	Lower Tier Municipality
	North Kawartha	Township	Lower Tier Municipality
	Otonabee-South Monaghan	Township	Lower Tier Municipality
	Smith-Ennismore-Lakefield	Township	Lower Tier Municipality
SIMCOE	Simcoe	County	Upper Tier Municipality
Population*: 436,630	Barrie	City	Single Tier Municipality
430,030	Orillia	City	Single Tier Municipality
	Bradford West Gwillimbury	Town	Lower Tier Municipality
	Collingwood	Town	Lower Tier Municipality
	Innisfil	Town	Lower Tier Municipality
	Midland	Town	Lower Tier Municipality
	New Tecumseth	Town	Lower Tier Municipality
	Penetanguishene	Town	Lower Tier Municipality
	Wasaga Beach	Town	Lower Tier Municipality
	Adjala-Tosorontio	Township	Lower Tier Municipality
	Clearview	Township	Lower Tier Municipality
	Essa	Township	Lower Tier Municipality
	Oro-Medonte	Township	Lower Tier Municipality
	Ramara	Township	Lower Tier Municipality
	Severn	Township	Lower Tier Municipality
	Springwater	Township	Lower Tier Municipality
	Tay	Township	Lower Tier Municipality
	Tiny	Township	Lower Tier Municipality
WATERLOO	Waterloo	Regional Municipality	Upper Tier Municipality
Population*: 507,096	Kitchener	City	Lower Tier Municipality
307,090	Waterloo	City	Lower Tier Municipality
	Cambridge	City	Lower Tier Municipality
	North Dumfries	Township	Lower Tier Municipality
	Wellesley	Township	Lower Tier Municipality
	Wilmot	Township	Lower Tier Municipality
	Woolwich	Township	Lower Tier Municipality

^{*}Statistics Canada (2011)

Interviews

Interviews were carried out by the author of this research and a paid research assistant who was funded through a SSHRC grant. The research formed a subcomponent of a larger project examining "Smart Growth". Interviews focused on municipal planners to gain insights from their practical experiences. Consulting planners, provincial planners and developers were also interviewed to gain a broader range of insights and to validate or provide additional context to responses. A standard set of open ended interview questions were developed to maintain consistency in questioning across interviews. A standardized approach is recommended for evaluations that involve topics of a politically sensitive nature, to help avoid problems of data legitimacy and credibility and to reduce the likelihood of interviewer bias (Patton, 2002). Questions were designed to be open ended to ensure that the interviews would still be useful to collect information about unanticipated or previously unknown barriers to plan implementation.

A number of additional approaches were used to ensure consistency in interview questioning and style. The author of this research reviewed the interview questions with the research assistant in advance of the interview process to ensure a common understanding of the questions and interview approach. Recognizing that responses could be impacted by perceptions about the interviewers' personal views (Morris, 2009) on growth management in general, and the Growth Plan more specifically, the interviewers adopted a conciliatory and encouraging interview style, avoided portraying personal views about the Growth Plan and deflected questions back to the interviewee if asked about personal views. Interviewers only deviated from the standard questionnaire to seek clarity on a statement or to obtain further detail about a particular response. Interviews were recorded and transcribed in full by the individual researcher who carried out the interview. All transcriptions were reviewed and verified against the original recording by the author of this research.

Interview candidates

Within each selected upper tier municipality interview candidates were selected using a criterion sampling approach, which is a useful method for gathering information-rich cases that will reveal importation program limitations for the purpose of identifying areas for improvement (Patton, 2002). Criteria for selection were 1) a high level of professional involvement in the implementation of Growth Plan policies through the municipal planning/decision making process (e.g. municipal planners and planning consultants), 2) involvement in the planning of development projects which have been or will be directly affected by the Growth Plan (e.g. residential or commercial developers), or 3) involvement or expertise in the development of the Growth Plan and its policies (e.g. provincial planners or bureaucrats).

Individuals who met at least one of the three criteria were identified using municipal and provincial government staff directories, municipal planning documents and agendas for planning working groups, newspaper articles pertaining to planning issues, and the planning and development consultants sections of the yellow pages. Names and contact information were compiled in a password-protected spreadsheet and all were contacted with a request for an interview.

A total of 38 individuals participated in the interviews, 30 of whom were municipal planners distributed relatively evenly across the three study regions (Table 7). An additional four interview participants were Provincial government employees from Ontario Municipal Affairs and Housing and the Ontario Growth Secretariat. A final four interviews were gathered from developers and home builders operating within the Greater Golden Horseshoe. Provincial government and development industry interviews were used to provide context to the interpretation of interviews in each of the case study regions.

Table 7. Breakdown of Interview Participants.

INTERVIEWEE TYPE	NUMBER OF RESPONDENTS
Waterloo Planners	10
Simcoe Planners	12
Peterborough Planners	8
SUBTOTAL	30
Provincial Government Officials	4
Development Industry Representatives	4
SUBTOTAL	8
TOTAL	38

Documents

A purposeful, criterion-based sampling approach was used to obtain documents relevant to the conceptual framework and the research questions for each case study. This technique is useful for the identification and selection of relevant, credible and in-depth information about a particular phenomenon of interest (Creswell, 2009). Municipal websites, local and regional newspapers and other media outlets, and research databases were queried using an online keyword search for all documents published since 2005 relating to the case study regions and containing the following topics or key words: Growth Plan, Places to Grow, growth management, smart growth, urban planning, rural planning, urban development, intensification, density, and urban form. Document sources were only selected for review if they contained locally-relevant information pertaining a barrier to growth management in one or more of the

case study regions. Documents that described factual information about local plan implementation but that did not directly or indirectly identify a barrier to implementation were used for reference purposes but were not included as a data source for the purpose of identifying barriers. For this reason, the number of documents used as a data source often represented a fairly small subset of the total number of documents published on the topic (e.g. media reports). Although data searches emphasized the time period following the adoption of the Places to Grow Act (2005), they also included, where relevant, earlier publications or reports relating to the keywords if they provided insight into local planning issues and growth management challenges.

A wide range of document sources were reviewed to obtain a full characterization of implementation barriers and local policy support for Growth Plan objectives (Table 8; Appendix B). The purpose of including a wide range of document types was to cast as wide as possible a net for the identification of local barriers to implementation. It was recognized that different sources may identify different types of barriers based on the purpose and audience of the source, and that all of these perspectives would contribute to a more fulsome understanding of local barriers. Sources included Provincial and municipal planning documents, media reports, publications from independent research institutes and academic papers. Planning documents selected for review included Official Plans and Official Plan Amendments, municipal staff reports to council, municipal and Provincial position papers and correspondence relating to Places to Grow Act, the Provincial Policy Statement, and the Growth Plan for the Greater Golden Horseshoe, Ontario Municipal Board decisions, growth management strategies, intensification plans, and any other municipal documents or plans adopted to guide local decision making with respect to the Growth Plan. Media reports included articles published by local news media that related to the Growth Plan, including political reactions to the Growth Plan and articles about urban growth, suburban development, and intensification. Media reports also included articles published by non-local media, such as Canadian Broadcasting Corporation and Toronto newspapers, provided that the topic of the article specifically pertained to a growth management issue in one of the case study regions. Where available, research specific to the individual case studies were also collected from academic journals and research institutes to inform the analysis. These research publications provided in depth analyses of local historical urban development, as well as particular planning issues or political pressures facing the case study regions. Like the other document sources, academic research papers and reports were only considered if they examined implementation or contextual barriers within one or more of the case study regions. Academic literature that examined planning and growth management issues in a general sense, outside of the specific local contexts of the case studies, were not used to identify local barriers to implementation.

Table 8. Number and Breakdown of Documents Reporting Barriers to Growth Plan Implementation.

CASE STUDY AREA	NUMBER OF DOCUMENTS
WATERLOO	
Municipal and Provincial Planning Documents and Communications	5
Media Reports	18
Stakeholder and Informal Group Communications	2
Academic Articles and Dissertations	3
Other Documents (e.g. reports and communications from independent research institutes, social planning organizations, professional associations, etc.)	4
SUBTOTAL	31
SIMCOE	
Municipal and Provincial Planning Documents and Communications	41
Media Reports	21
Stakeholder and Informal Group Communications	2
Academic Articles and Dissertations	2
Other Documents (e.g. reports and communications from independent research institutes, professional associations, etc.)	1
SUBTOTAL	67
PETERBOROUGH	
Municipal and Provincial Planning Documents and Communications	9
Media Reports	18
Stakeholder and Informal Group Communications	0
Academic Articles and Dissertations	2
Other Documents (e.g. reports and communications from independent research institutes, professional associations, etc.)	1
SUBTOTAL	30
TOTAL	128

The sampling method for the collection of documents, which was purposeful and criterion-based rather than random, resulted in variability in the number and types of document collected for each study region. The variability was largely due to the availability of documents that met the sampling criteria (i.e. contained locally-relevant information pertaining to a growth management issue) in each case study region. Differences were most notable for Simcoe County, where a total of 41 municipal and Provincial planning documents and communications were collected, in contrast with five documents for Waterloo and nine documents for Peterborough. The availability of relevant government planning documents and communications can be attributed to the fact that Simcoe County was the subject of a Provincially-initiated study and Intergovernmental Action Plan that resulted in a significant amount of research and documentation of local growth management issues. In contrast, growth management planning issues in

Waterloo and Peterborough case study regions have not been the subject of a significant Provincially-initiated study or plan beyond the Growth Plan.

While the documents varied in terms of type and quality of the information provided, they shared the common characteristic of describing the socio-political, economic and environmental setting in which spatial planning and decision making for each case study region was carried out. The breadth in document type was considered to provide a broader portrayal of case study conditions than that which could be obtained from a single document type. For example, media reports typically emphasized politically contentious but relatively short-term planning issues, whereas academic research provided richer and more nuanced insights into the complex historical, spatial, financial and political conditions that influenced planning decisions within each case study region. Municipal planning documents and council reports tended to represent a range of professional planning viewpoints about the Growth Plan and technical challenges associated with discrete planning issues, while correspondence between municipalities and the Province revealed information about relationships, agency coordination and power between levels of government. Despite their varied focus, the different document types were considered to be of equal value in the characterization of the full range of barriers to growth management planning.

Interview and Document Analysis

A mixed method approach was used to analyze the various information sources for each case study region. A quantitative, directed content analysis approach was first used to measure the frequency with which each case study region reported the barriers to Growth Plan implementation identified in the literature (Table 4). Reporting frequency was used to provide initial direction regarding barriers that may warrant further investigation. This approach is useful for research topics which rely on qualitative data and for which there is an existing theory that the data can be used to confirm or expand upon (Hsieh & Shannon, 2005). Barriers identified in the literature and described in Table 4 were assigned a unique numerical code. The content of all data sources, including interview transcripts, planning documents and media reports, were then systematically analyzed and sentences or groupings of sentences that directly or indirectly described an identified barrier were assigned the corresponding code. More than one corresponding code was assigned where statements revealed more than one barrier. Newly identified barriers that were not previously identified in the literature review were also noted and assigned a unique code as they were encountered. All coding was carried out by the author of this research.

To identify areas of focus for further evaluation, codes for each barrier type were summed for each region. The resulting values provided a measure of the frequency with which each barrier was reported in each study region. A barrier was counted only once for each data source regardless of how

many times it was mentioned, and so frequency of reporting was calculated as the sum of the number of sources in which a particular barrier was described. This approach was used to ensure that all data sources were considered equally, and that barrier rankings were not impacted by variability in document type and focus, or communication styles. Data sources were weighted equally in recognition of the fact they provided different but equally useful insights and perspectives about the challenges to growth management.

Variability in the number of total data sources between study regions limited useful comparisons of a barrier's reported frequency between regions. Instead, reporting frequency was used to calculate the proportion of total sources that reported a particular barrier. Relative reporting frequency values were used to identify barriers that were most commonly reported in multiple documents and interview sources as a coarse measure of barriers that could be considered pervasive, long standing or of widespread concern. The relative frequency that a barrier was reported provided a basis upon which comparisons could be made. In calculating the relative reporting frequency, this research assumed a correlation between the frequency of barriers identified by different key actors, documents and media accounts, and the significance of these barriers on planning practice. Potential key barriers for each study region were identified as those barriers that were described by at least 10% of the data sources. A 10% threshold was chosen because it captured a sufficient number of barriers to permit the identification of important themes, interrelationships and patterns in each region.

Potential key barriers were then critically evaluated in combination with local contextual and historical planning information to confirm the importance of frequently reported barriers and identify missing or underlying barriers, with the ultimate objective of understanding, characterizing and comparing local planning cultures. The critical evaluation involved an examination of the Provincial planning context and formal institutional setting for planning in Ontario, and a historical review of urban growth and local growth management approaches for each region. Within this context, local planning discourses, as presented in the collected documents and interviews, were analyzed to understand the following:

- how and if growth management was interpreted and recognized as a local problem;
- how barriers to managing growth were identified and presented by planners, political actors, developers and stakeholder groups;
- what explanations, arguments, metaphors and narratives were used to explain the opportunities and challenges for local growth management planning.

Information from the analysis was used to identify underlying issues related to power relations, values, ideologies, and identities that may support or contradict local growth management efforts. The analysis was also used to further refine or expand on key barriers identified for each case study region. The results of the analysis were then used to construct a model of barriers to growth management for each region and to identify patterns and relationships between barriers. The model and accompanying discourse analysis was then used as a frame to answer the research questions.

Conceptions of Implementation

Implementation of regional plans like the Growth Plan has been evaluated using a number of different approaches. An evaluation of plan conformance assesses plan implementation in terms of the degree to which a plan achieves its intended goals and objectives, or "the conformance degree between the outcomes on the ground and the plan proposals and the promotion of planning goals and objectives through the available implementation instruments" (Oliveira & Pinho, 2010, p. 346). In the case of growth management planning, a "successful" plan would therefore be one that results in land use and built form that directly reflect the objectives of the plan, such as the achievement of specific intensification targets or a reduction in the rate of loss of peripheral agricultural lands to urban development. Establishing a causal relationship between the planning policy and built form, however, can be challenging given the evolving nature of most plans, time lags in the development process, and the multiplicity of variables affecting land use and urban development, including population growth and demographics, housing preferences, economic growth, past land uses and environmental constraints (Gosnell et al., 2011). Reliance on the correlation between land use changes and plan adoption may result in the detection of spurious rather than causal relationships. As a result, scholars investigating plan conformance have focused on the implementation and outcome of singular planning objectives rather the implementation of broad plans with multiple objectives, such as growth management plans. Laurian, Berke and colleagues (2006; 2004b), for example, evaluated development permit application approvals and their conformance to specific policies within municipal plans.

Plan performance is another approach that conceives implementation as process in which plans are consulted as part of a decision making process rather than as a directive. Instead of seeking to establish a causal relationship between a plan and a landuse or built form outcome, the performance framework views implementation as the extent to which a plan is referred to by decision makers (Alexander & Faludi, 1989; Berke et al., 2006). Evaluating implementation under this conceptual framework acknowledges that deviations from a plan may sometimes be justified. Comprehensive plans like the Growth Plan, for example, may occasionally have conflicting objectives, such as protection of

water resources and significant natural features and intensification. Moreover, certain objectives may be achieved differently in different contexts. In acknowledging contextual differences, an understanding of plan performance may better reflect the uncertainties and variability in specific municipal planning practices. The performance approach is challenged by difficulties in quantifying the degree to which a plan is consulted and adhered to in decision making and determining what types of situations might justify deviations from the plan (Alexander & Faludi, 1989; Mastop & Faludi, 1997).

This study evaluates Growth Plan implementation using the performance approach. Performance is deemed most suitable given the broad scope of Growth Plan objectives, the short time span since the Plan was adopted, and the time lag between past development approvals and actual construction. In using a performance approach, this research intends not to quantify land use and its conformance to the Plan, but rather investigate how municipal planners reference and use the Plan within their differing social, political and economic environments.

Terminology

The term *regional plan* is used in this research to refer to any regulatory policy or plan that provides a land use framework for an area comprised of multiple urban and/or rural municipalities. Regional plans differ from local plans in their scale of implementation, with the latter implemented exclusively at the scale of a single municipality.

Regional growth management plans are regional plans that generally aim to: a) protect open space, natural areas, and agricultural areas; b) discourage low-density development and encourage compact development; and c) increase the modal share of transit and active transportation (Frenkel & Orenstein, 2012; Ingram et al., 2009). Regional growth management plans from different regions share a number of common elements including a) a regional policy framework to guide local municipal planning; b) the need for multi-agency coordination for the implementation of regional policies, including state or provincial, regional and local municipal governments; and c) a combination of regulations, policies and incentives to achieve growth management goals (Leo, Beavis, Carver, & Turner, 1998). In addition to the Growth Plan for the Greater Golden Horseshoe, examples of regional growth management plans include legislated growth management programs adopted by the states of Florida, Maryland, Oregon and New Jersey.

Growth Management vs. Growth Control

One of the challenges in interpreting the successes or failures of growth management plans is the frequent conflation of policy types with scale of implementation, which can obscure the relationship

between growth management policies and their outcomes (Carruthers, 2002b; Leo et al., 1998). Local plans that include growth control policies, for example, have significantly different outcomes than regional growth management policies since the objective of the former is to prevent rather than manage growth (Leo et al., 1998). Such policies can actually contribute to sprawl by displacing development to other regions with less stringent controls. For example, studies of local growth controls in the United States have demonstrated that locally-conceived and -implemented policies can result in an unevenly distributed set of land use restrictions across a region. The heterogeneity in restrictions leads developers to seek those areas most free of regulation, which in turn can push development into outlying areas of a region rather than concentrating it within the built up area (Carruthers, 2002a; Pendall, 1999; Shen, 1996). As a result of its incongruency with regional growth management, the study of local growth control policies, falls outside of the scope of this research.

Descriptive Statistics and Background Data

To assist in the interpretation of interview data, the socio-political context of each case study region and its lower and single tier municipalities was characterized using Statistics Canada community profile data (2011), municipal documents, academic literature and newspaper articles. The focus of this data collection stage was on the gathering of descriptive statistics and news stories that had a particular relevance to urban planning, such as municipal population, employment and growth statistics and local decisions related to urban development, transportation and urban form. Contextual information derived from this stage is summarized in Chapter 6.

Data Reliability, Validity and Study Limitations

This research aims to contribute to an understanding of the culture of planning practice in Canada. There have been numerous regional planning efforts in the Toronto region since the 1940s, but most attempts failed to achieve their goals due to public opposition over the loss of local authority in planning (White, 2007). What might make the Places to Grow Act and the Growth Plan for the Greater Golden Horseshoe different from past failed regional planning efforts is the unprecedented amount of municipal consultation that was conducted in the development of the plan (Brad Graham, personal communication) and the more de-centralized approach to implementation (White, 2007). But while decentralization permits more local control over how the Growth Plan will be implemented, its opens the Plan to the possibility of ineffective local implementation due to influential social, political and economic forces that favour the prevailing urban form. To date, neither the Ontario Government nor the Ontario Growth Secretariat, the latter which is responsible for overseeing municipal conformance to the Growth

Plan, have released follow-up studies assessing the barriers facing municipalities in implementing the Plan (although performance indicators have been developed to guide future assessments). By examining municipal planners' frontline experiences, this research will help fill this gap. Data from this research will be useful for municipalities, who may benefit from learning about other municipalities' implementation successes and challenges, and for use in upcoming reviews of the Growth Plan.

A number of methodological issues encountered in this research warrant consideration. The qualitative data collected is inadequate for an exploration of planning outcomes in each region. Therefore, in exploring the research questions, this research does not seek to establish a causal relationship between the barriers to Growth Plan implementation and the built forms across case study regions. Rather, the research explores the source and characteristics of different barriers to local growth management plan implementation and how implementing actors and the institutions in which they are situated variously reinforce or resist these barriers. In addition, this research assumes a correlation between the frequency with which barriers are reported by actors, planning documents and the media, and the magnitude of impact that these barriers have on local planning practice. While this assumption is consistent with other analyses in which qualitative data is examined using content analysis methods, empirical research to confirm and quantify the relationship between reported barriers and magnitude of impact on planning practice would improve our understanding of the role of barriers in inhibiting policy implementation.

While useful for obtaining a detailed and in depth understanding of the particular barriers facing the study municipalities, the case study methodology used for this research may provide results of limited application to regions facing a different socio-political and regulatory context. For example, results may be less generalizable to regions under a significantly different growth management planning framework, or that do not share Canada's municipal finance and governance structures. While the case studies provide specific, context-dependent information and are, according to Flyvberg (2006), a necessary surrogate for general context-independent theories that are difficult if not impossible in the social sciences, subsequent studies of growth management implementation in other regions would help to deepen our understanding of the role of different planning contexts on policy implementation.

In identifying barriers, the research relied on challenges reported by key municipal actors involved in the planning process, as well as media, planning reports and academic literature. While interview data can generate detailed insights into local planning practice and political contexts, it is also influenced by the power relations embedded in the interview process and the "self-presentation and impression management" strategies used by interviewees to control the portrayal of themselves and their work (S. Moore, 2015). These relations and strategies may include an interviewer's efforts to establish a

rapport with the interviewer and an interviewee's desire to obscure personal biases and elevate how they are perceived by the interviewer (S. Moore, 2015). The interactions inherent in the interview process present challenges for the interpretation of interview data, particularly when the information provided may consciously or unconsciously conceal legitimate information. Moreover, since it was an objective of this research to highlight less visible, embedded barriers to growth management, interviewees were required to recognize and articulate their own underlying motivations, biases and beliefs as well as those of others.

The potential pitfalls of relying on interview data, such as skewed or selective description of barriers, was addressed in a number of ways. First, municipal interview results were compared against interviews with provincial actors, local media reports, planning documents, council decisions, and contextual information about the case study region, to determine how well the sentiments expressed were supported by other sources. It was recognized that implementing actors may be more likely to identify barriers outside of their sphere of direct influence, such those associated with the development industry, the political arena and societal scale barriers. Planning capacity, communication with developers, enforcement and administration, for example, were rarely identified as barriers by planners and more likely to be identified through planning and media reports. The limited emphasis on the technical, educational, mediating and administrative roles of planners contrasts with empirical findings in the planning literature which highlights the role and influence of planners in raising awareness among stakeholders, mediating conflict, and negotiating policy and development outcomes. Municipalities with greater planning capacity, for example, have been found to be more likely to adopt growth management policies and mediate the negative impact of divergent interests on the adoption of those policies (Brody et al., 2006; Hawkins, 2011; Hawkins, 2014).

Second, additional sources of information from the interviews, such as the vocabulary and self-portrayals of interviewees, served as data in and of itself, and helped to reveal how implementing actors interpreted their role in managing growth. In the case of staff commitment to growth management, reported frequency relied on an interpretation of the interviewee's comments about the Growth Plan, which rarely included the outright self-identification by planners of a lack of commitment. As suggested by Moore (2015), the vocabulary and types of information shared with the interviewer served as data and were used in a more rigorous examination of underlying belief systems, identities, strategies, constraints and rationalities. Despite efforts to critically evaluate interview data, it is possible, however, that some barriers were insufficiently accounted for.

Other barriers – particularly those related to market distortions and neoliberalism – received little to no recognition by interview respondents or planning documents even though they were the focus of considerable attention in the planning and policy implementation literature. These results can be interpreted in one of two ways: either market distortions and neoliberal-oriented worldviews and practices do not contribute to the larger societal environment within which the Growth Plan is implemented, or they form a cognitive frame that is imperceptible to the actors tasked with implementing the Growth Plan. Recognizing the large body of research that examines of the impacts of market distortions, market based planning and neoliberalism on planning practice and spatial outcomes (e.g. Adams & Tiesdell, 2010; Allmendinger & Haughton, 2010; Blais, 2010; Brenner & Theodore, 2002; Filion & Kramer, 2011; Gerber, 2016; Gunder, 2010; Heurkens, Adams, & Hobma, 2015; Peck & Tickell, 2002; Peck, 2011; Sager, 2009; Sager, 2011; Slack, 2002; Tomalty & Skaburskis, 2003) this research proposes the latter interpretation.

Triangulation

This study relies on a broad range of data types, including face-to-face interviews, newspaper articles, Statistics Canada community profile data, municipal and provincial planning documents, and academic literature to ensure the accuracy and validity in the characterization of each municipality's specific planning context and the barriers therein. No time range limited the scope of the literature review, although most studies reviewed were published since 1980. The semi-structured interviews were conducted in 2010 – four years after the adoption of the Growth Plan. Descriptive statistics were gathered, where possible, for the year 2010, although older (2006) statistical information was used when more current data was unavailable. Relevant planning documents and newspaper articles were gathered from between 2005 and 2014, although some older documents were included where relevant. Selection of the four case study municipalities was non-random. Municipalities were chosen to vary widely by geographic location, compactness, population size, and rate of growth and growth pressure, to permit an understanding of a broad range of barriers facing municipalities in the Greater Golden Horseshoe.

Chapter 5. Planning Context for Municipal Implementation of Growth Management

Municipal Responsibilities

The relationship between municipalities and the province of Ontario was established by Canada's Constitution Act (1867), which declared municipalities to be subservient to the provinces (Wolfe, 2002). The province enables municipalities to deliver services that are typically of a local nature, including planning and economic development, and infrastructures such water, sewer and roads. At any time, however, the province can intervene to change the terms under which municipalities do business, through amalgamations, boundary changes, additional or reduced municipal service responsibilities, and changes to revenue generating capabilities (Wolfe, 2002).

The provision of municipal planning services in Ontario is governed by the Ontario Planning Act. A Provincial Policy Statement (PPS) issued under the Act provides municipalities with more specific direction over issues of provincial interest. Amendments to the PPS in 2005 required that municipalities be consistent with the PPS rather than the less stringent, former requirement to have regard to the policies. The PPS provides direction to municipalities for achieving efficient development and landuse patterns, efficient use of infrastructure, protection of the environment and resources and conservation of cultural heritage. The Act is administered by the Ministry of Municipal Affairs and Housing.

Between 2000 and 2006, the province adopted a series of additional statutes to provide further direction to municipalities regarding planning for development and infrastructure. These included the Oak Ridges Moraine Conservation Act (2001) and Greenbelt Act (2005), both administered by the Ontario Ministry of Municipal Affairs and Housing, and the Places to Grow Act (2006) administered by the Ontario Ministry of Infrastructure. Although administered by two separate arms of the province, the Acts are intended to work together to ensure the conservation of natural and agricultural areas through more efficient use of land and infrastructure.

Within this provincial legislative framework, upper and single tier municipalities are required to adopt an Official Plan consistent with the policies within the PPS and supporting legislation. Lower tier municipalities must adopt policies that adhere to the Official Plan of the upper tier municipality. The Ontario Ministry of Municipal Affairs and Housing retains the authority to approve or reject upper and single tier municipal Official Plans. Approval authority for lower tier Official Plans can vary depending on the municipality, with some under the authority of the upper tier municipality and others reporting

directly to the Ministry. Municipal council planning decisions may be appealed to the Ontario Municipal Board, which is an adjudicative tribunal whose decisions are binding on all parties.

Municipal Finance

Canadian municipalities have limited options for generating revenues to pay for the delivery of local services. In Ontario, property taxes comprise 41% of municipal revenues followed by provincial or federal grants which comprise approximately 22% of revenues (Commission on the Reform of Ontario's Public Services, 2012). Remaining revenues sources include development charges, user fees, and licenses. Development charges are controlled by the Development Charges Act and may only be charged by a municipality to cover the direct costs of providing infrastructure and soft services to support new developments. Recent changes to Ontario's Development Charges Act permit municipalities to use development charges to fund a broader range of off-site municipal infrastructure, such as transit and waste management services. Additional non-monetary exactions can be required as a condition of a planning application (e.g. a plan of subdivision), including the dedication of land for roads, parks, schools and public works, or it may be agreed that the developer provides cash in lieu of the land dedications (Slack, 2002). Although intended as a cost-recovery instrument for new development, the infrastructure funded through development charges, such as the creation of new parks or improvements to transit service, can also indirectly benefit existing development.

In the 1990s, a Local Services Realignment (LSR) initiative by the Conservative provincial government at the time resulted in the downloading of services to municipalities that were formerly delivered by the province, including social housing, and environmental protection. The download was intended to be revenue neutral through a redistribution of education tax revenues from the province to municipalities and a provincial grant called a Community Reinvestment Fund (CRF). Municipalities, however, argued that the costs to provide the new services exceeded the additional revenues and that they were obliged to reduce investment in longer term priorities such as infrastructure to pay for more immediate service delivery requirements such as social assistance (Commission on the Reform of Ontario's Public Services, 2012; Sancton, 2005). Dispersed urban forms typically found in most Ontario municipalities served to exacerbate the growing infrastructure deficit through the creation of a small tax base to fund large areas of infrastructure and service (Blais, 2010; Slack, 2002). By the mid 2000s, the Association of Municipalities for Ontario announced that the infrastructure deficit had reached crisis proportions (Association of Municipalities Ontario, 2007).

Deficits in revenues are absorbed by increasing property taxes or where increased taxes are politically impossible, reducing the level of service (Skaburskis & Tomalty, 2000). With property taxes

and development charges contributing to the majority of a municipality's revenue, municipalities are incentivized to increase revenues through new growth and development (Desfor, Keil, Kipfer, & Wekerly, 2006; Eidelman & Taylor, 2010; Filion, 2003).

Urban Planning and Development

Concurrent with a rising municipal infrastructure deficit, Ontario municipalities have become increasingly aware of the inefficiencies of low density development and the financial burden of maintaining them with limited tax revenues. Intensification of urban centres has become increasingly viewed by municipalities as an economic development strategy to help revitalize and enhance downtown cores, thereby increasing competitiveness, attracting investment, improving livability and as a way to increase tax revenues where greenfield capacity was limited (Bunce, 2004; Desfor et al., 2006).

Other pressures emerged from mounting public concern about urban sprawl in the 1980s and 90s. Public concern about urban sprawl and traffic gridlock was particularly pronounced in the suburban municipalities within the Greater Toronto Area where the social and environmental costs of sprawl were most evident (Eidelman, 2010; White, 2007). Residents of exurban and rural estate developments viewed urban expansion as a threat to the rural and natural amenities that they enjoyed, and voiced significant and sustained opposition to further urban expansion (Desfor et al., 2006). Political pressure from exurbanites to address the problems of sprawl was reinforced by environmental groups who opposed sprawl and challenged conventional urban planning in Ontario. For example, a high profile conflict over the protection of the Oak Ridges Moraine north of Toronto between suburban residents, activists and developers was a key driving force behind the Progressive Conservative government's adoption of the Oak Ridges Moraine Conservation Act and Plan (Gilbert et al., 2005).

Smart Growth: Growth as an Uncontested Objective

Reflecting a new planning paradigm for 'smart growth' that had emerged in the United States, the Progressive Conservative government established a series of Smart Growth Panels to investigate the opportunities for alternative forms of urban growth (Brennan, 2002). The Central Ontario Smart Growth Panel, consisting of appointed citizens and elected officials, was mandated to find solutions to the growth-related problems of gridlock and waste disposal. The panel produced a final report that recommended many of the tenets of smart growth, including compact, efficient development, the establishment of priority locations for public infrastructure funding, and protection of agricultural areas (Bourne, Taylor, Maurer, Luka, & Bunce, 2003). The report has been described as "long on visions and ideals, and short on realistic strategies for achieving them" (White, 2007). Nevertheless, the report helped pave the way for later provincial governments to adopt a regional growth management planning mandate.

Although responding to a range of concerns about low density development, the 2002 "Smart Growth" panel and report initiated by the Progressive Conservative government was couched an uncontested pro-growth and neoliberal discourse. The advocacy of growth as the only desirable and effective option for municipal economic sustainability, health and wellbeing is an entrenched planning and development paradigm that fails to consider the full range of implications and options (Leo & Anderson, 2006; Sousa & Pinho, 2015). Promoted as a solution for local economic sustainability, rapidly growing cities and regions benefit from a perception of being successful, desirable, and admired, while cities with slow or no growth are viewed as unfortunate, and at risk of being left behind (Leo & Anderson, 2006).

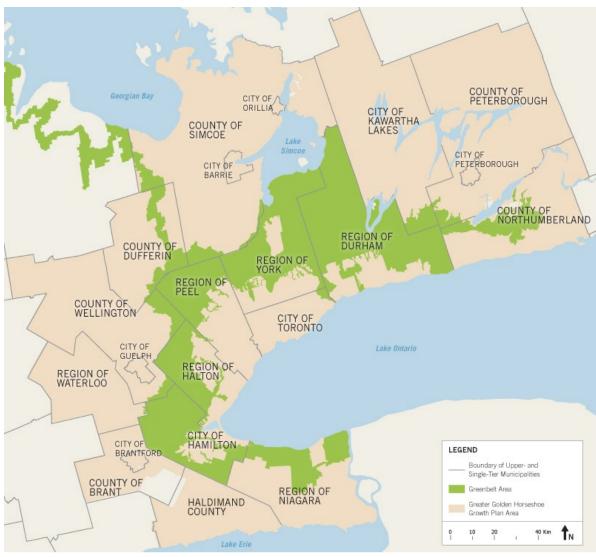
A prevailing neoliberal discourse in Ontario accentuated the "growth fixation" by emphasizing the benefits of market-based solutions to resolve planning problems. The Smart Growth initiative examined ways in which city regions could improve their competitiveness to attract economic investment in the new global marketplace (Bradford, 2003), building on earlier Conservative neoliberal initiatives such as the Savings and Restructuring Act (1995) and the Fewer Politicians Act (1997) that saw the downsizing and amalgamation of municipalities. Amalgamation of municipalities was argued to reduce municipal service duplication and decrease the number of paid elected officials (Kushner & Siegel, 2003). Newly streamlined governments were expected to yield quicker and simpler approval processes for new development and lower taxes as a result of economies of scale for infrastructure and service provision which would in turn attract investment (Bradford, 2003).

A subsequent Liberal government elected in 2004 expanded on the previous government's municipal restructuring and smart growth initiatives by reforming the provincial land use planning framework. The Liberal government reversed few of the key changes initiated under the PC government, prompting some scholars to describe them as having "re-branded and re-packaged core neoliberal policies" (Fanelli & Thomas, 2011). Significant regulatory reforms were introduced to the provincial planning framework through amendments to the Planning Act (Bill 51 and 26; 2004) which strengthened provincial oversight of local land use by requiring municipalities to be "be consistent with" rather than merely "have regard to" Provincial Policy Statements. The Provincial Policy Statements were revised to emphasize the provincial interest in developing efficient, competitive city regions through intensification and compact growth.

Following the Smart Growth Panel recommendations, the Liberal government also embarked on a series of significant initiatives to manage urban growth at a regional scale. The Places to Grow Act, adopted in 2005, together with Greenbelt Act adopted that same year, marked the first regional planning

initiatives to be adopted by the province in over 3 decades (White, 2007). The Places to Grow Act mandates the Ministry of Infrastructure (formerly the Ministry of Energy and Infrastructure) to prepare regional growth plans for the purpose of reducing urban sprawl and making more efficient use of infrastructure by promoting more compact development. The first of these plans was the Growth Plan for the Greater Golden Horseshoe, released in 2006, which established a 25 year planning framework for growth in the region centred on Toronto (Figure 5).

Like their Conservative predecessors, the Liberal government framed the problem of sprawl in economic terms, tying the Places to Grow Act and the associated Growth Plan for the Greater Golden Horseshoe to objectives of global competitiveness, growth, and market-based efficiency (Gilbert et al., 2005; Pond, 2009; Wekerle, Sandberg, Gilbert, & Binstock, 2007). Sprawling development was argued to "threaten the province's future prosperity and ability to compete in the integrated North American economy" (Pond, 2009, p. 418), through loss of productivity as a result of inefficient use of land, infrastructure and traffic congestion problems. In addition, higher taxes would be required to support the creation and maintenance of inefficient infrastructure that serviced low density development and the health care costs associated with automobile dependency and its associated pollution. Lastly, quality of life arguments were framed in such a way as to emphasize the role of sprawl in reducing Ontario's ability to attract knowledge workers (Pond, 2009).



Note: The information displayed on this map is not to scale, does not accurately reflect approved land-use and planning boundaries, and may be out of date. For more information on precise boundaries, the appropriate municipality should be consulted. For more information on Greenbelt Area boundaries, the Greenbelt Plan 2005 should be consulted. The Province of Onlario assumes no responsibility or liability for any consequences of any use made of this map.

Figure 5. Municipalities within the Greater Golden Horseshoe Growth Plan Area. (Ministry of Infrastructure).

Ontario's Growth Plan for the Greater Golden Horseshoe

The Growth Plan directs the location of growth by assigning specific population and employment forecasts to upper and single tier municipalities within the Greater Golden Horseshoe. Upper tier municipalities allocate forecasted population and employment numbers to lower tier municipalities. An amendment released in 2012 set out clearer policy direction for the Simcoe sub-area, and allocates population and employment forecasts to the area's lower tier municipalities. A second amendment was adopted in 2013 to update and extend population and employment forecasts to 2041 (Table 9). In 2017, a

revised Growth Plan was released which provided new policies around integrated planning around public transportation and growth targets.

Under the 2006 Plan and now the 2017 updated Plan, municipalities are required to focus development in built-up areas to make efficient use of existing infrastructure and to minimize the adverse effects of sprawl such as gridlock and loss of natural areas and agricultural lands. The mechanism through which the Plan encourages intensification is the intensification target that requires municipalities to allocate a certain proportion of their total growth to built-up areas. In addition, the Plan requires municipalities to achieve density targets for greenfield areas to maximize the utility of new infrastructure and create communities that can be effectively serviced by public transit. These and other key policies of the 2006 Growth Plan are detailed below:

- 1. direct 40% of new residential growth to the built-up areas by 2014;
- 2. focus intensification in Urban Growth Centres to achieve density targets of:
 - i. 400 residents and jobs combined per hectare for each of the *urban growth centres* in the City of Toronto;
 - ii. 200 residents and jobs combined per hectare for each of the Downtown Brampton, Downtown Burlington, Downtown Hamilton, Downtown Milton, Markham Centre, Mississauga City Centre, Newmarket Centre, Midtown Oakville, Downtown Oshawa, Downtown Pickering, Richmond Hill/Langstaff Gateway, Vaughan Corporate Centre, Downtown Kitchener and Uptown Waterloo urban growth centres;
 - iii. 150 residents and jobs combined per hectare for each of the Downtown Barrie, Downtown Brantford, Downtown Cambridge, Downtown Guelph, Downtown Peterborough and Downtown St. Catharines *urban growth centres*;
- 3. direct development in designated greenfield areas to accommodate a minimum density target of 50 residents and jobs combined per hectare;
- 4. encourage the development of transit supportive and pedestrian friendly, complete communities (e.g. urban environments that offer a diverse mix of land uses, employment, housing types as well as public open space and easy access to local stores and services);
- 5. provide convenient access to intra- and inter-city transit;
- 6. ensure the availability of sufficient land for employment to accommodate forecasted growth
- 7. plan for a balance of jobs and housing in communities across the GGH to reduce the need for long distance commuting and to increase the modal share for transit, walking and cycling;
- 8. direct growth to settlement areas unless expansions are shown to be necessary through a municipal comprehensive review;

 direct major growth to settlement areas that offer municipal water and wastewater systems and limiting growth in settlement areas that are serviced by other forms of water and wastewater services.

Revisions to the Growth Plan in 2017 resulted in a number of new policies to support specific densities around transit and employment areas, higher density and intensification targets and clearer procedures for municipalities wish to request alternative targets or expand settlement areas. Policies for the Simcoe sub-area were updated and integrated into the Growth Plan. Key revisions included:

- 1. increase of the minimum intensification target for built up areas to 60% by 2031, with 50% to be achieved before the next municipal comprehensive review (to be completed by 2022) is approved and in effect;
- 2. increase of minimum density targets for designated greenfield areas to 80 residents and jobs combined per hectare by 2031, with an interim designated greenfield area density target of 60 residents and jobs combined per hectare to apply, beginning in 2022;
- 3. new minimum density targets for major transit station areas on priority transit corridors or subway lines.
 - i. 200 residents and jobs combined per hectare for those that are served by subways;
 - ii. 160 residents and jobs combined per hectare for those that are served by light rail transit or bus rapid transit; or
 - iii. 150 residents and jobs combined per hectare for those that are served by the GO Transit rail network;
- 4. a requirement for upper- and single-tier municipalities to establish minimum density targets for all employment areas through a municipal comprehensive review;
- 5. new provisions that require upper- and single-tier municipalities to undertake a municipal comprehensive review in advance of any requests to the Province for alternative intensification and density targets;
- 6. new provision to enable the Minister to establish delineated built boundaries and undelineated built-up areas, where appropriate.

Table 9. Forecasted Population and Employment for Upper- and Single-Tier Municipalities within the Greater Golden Horseshoe to 2041 (in 1000s) (MI, 2013; MI, 2017).

	PC	PULATION		EMPLOYMEN		
MUNICIPALITY	2031	2036	2041	2031	2036	2041
Region of Durham	970	1,080	1,190	360	390	430
Region of York	1,590	1,700	1,790	790	840	900
City of Toronto	3,190	3,300	3,400	1,660	1,680	1,720
Region of Peel	1,770	1,870	1,970	880	920	970
Region of Halton	820	910	1,000	390	430	470
City of Hamilton	680	730	780	310	330	350
County of Northumberland	100	105	110	36	37	39
County of Peterborough	70	73	76	20	21	24
City of Peterborough	103	109	115	52	54	58
City of Kawartha Lakes	100	101	107	29	30	32
County of Simcoe	416	456	497	132	141	152
City of Barrie	210	231	253	101	114	129
City of Orillia	41	44	46	21	22	23
County of Dufferin	80	81	85	29	31	32
County of Wellington	122	132	140	54	57	61
City of Guelph	177	184	191	94	97	101
Region of Waterloo	742	789	835	366	383	404
County of Brant	49	53	57	22	24	26
City of Brantford	139	152	163	67	72	79
County of Haldimand	57	60	64	22	24	25
Region of Niagara	543	577	610	235	248	265
TOTAL	11,950	12,740	13,480	5,650	5,930	6,270

While generally offering a uniform policy direction for all municipalities in the Greater Golden Horseshoe, the Plan does make some distinction between "inner ring" municipalities located within the boundary established by the Greenbelt and "outer ring" municipalities located outside of the Greenbelt. Inner ring municipalities, most of which are urban, are directed to accommodate approximately 75% of

the region's population and employment growth by 2041, leaving 25% for the less densely populated outer ring (Table 10).

Table 10. Population and Employment Allocations for Inner and Outer Ring Regions of the Greater Golden Horseshoe (Ontario Ministry of Public Infrastructure Renewal (MPIR), 2006).

	POPULATION			EMPLOYMENT			
GGH REGION	2031	2036	2041	2031	2036	2041	
Inner Ring	9,010	9,590	10,130	4,380	4,580	4,820	
Outer Ring	2,940	3,150	3,350	1,280	1,360	1,450	
TOTAL	11,950	12,740	13,480	5,650	5,930	6,270	

Recognizing that more rural municipalities in the outer ring of the Golden Horseshoe may face unique challenges in the implementation of proposed density and intensification targets, the original 2006 Plan permitted municipalities to request alternative targets. These exceptions pertain to General Intensification (s. 2.2.3.4) and Designated Greenfield Areas (s. 2.2.7.5):

2.2.3.4 The Minister of Infrastructure may review and permit an alternative minimum intensification target for an upper- or single-tier municipality located within the outer ring to ensure the intensification target is appropriate given the size, location and capacity of built-up areas (Ontario Ministry of Public Infrastructure Renewal (MPIR), 2006).

2.2.7.5 The Minister of Infrastructure may review and permit an alternative density target for an upper- or single-tier municipality that is located in the outer ring, and that does not have an urban growth centre, to ensure the density target is appropriate given the characteristics of the municipality and adjacent communities (Ontario Ministry of Public Infrastructure Renewal (MPIR), 2006).

Updates through the 2017 Growth Plan established clearer requirements for requesting alternative intensification and density targets. These include undertaking a municipal comprehensive review that demonstrates that the request will meet a set of specific criteria. The process and criteria for seeking alternative intensification targets (Section 2.2.2.1) and interim targets (Section 2.2.2.2), for example, are provided in Sections 2.2.2.5 and 2.2.2.6 as follows:

2.2.2.5 For upper- and single-tier municipalities, council may request an alternative to the target established in policy 2.2.2.2 through the next municipal comprehensive review where it is demonstrated that this target cannot be achieved and that the alternative target will:

- a) maintain or improve on the minimum intensification target in the official plan that is approved and in effect;
- b) be appropriate given the size of the delineated built-up area;
- c) account for existing infrastructure, public service facilities, and capital planning;
- d) account for existing planning approvals and other related planning studies;
- e) consider the actual rate of intensification being achieved annually across the upper- or single-tier municipality;
- f) support diversification of the total range and mix of housing options in delineated built-up areas to the horizon of this Plan, while considering anticipated demand;
- g) account for lands where development is prohibited or severely restricted; and
- *h)* support the achievement of complete communities
- 2.2.2.6 For upper- and single-tier municipalities in the outer ring, council may request an alternative to the target established in policy 2.2.2.1 through a municipal comprehensive review where it is demonstrated that target cannot be achieved and that the alternative target is appropriate given the criteria in policy 2.2.2.5.
- 2.2.2.7 The Minister may permit an alternative to the target established in policies 2.2.2.1 and 2.2.2.2. If council does not make a request or the Minister does not permit an alternative target, the targets established in policies 2.2.2.1 and 2.2.2.2 will apply accordingly.

Supporting Plans and Policies

Following the adoption of the Growth Plan in 2006, the province announced a number of parallel initiatives to support municipalities' implementation of the Plan. The Plan was strategically developed under the authority of the Ministry of Infrastructure rather than the Ministry of Municipal Affairs and Housing to take advantage of the close ties between Growth Plan objectives and selective investment in municipal infrastructure. Accordingly, most parallel initiatives related to infrastructure development, including *Building Together*, a long term infrastructure plan (2011), the redistribution of provincial gas tax revenue to municipalities for investment in transit, the establishment of a regional transportation planning body called *Metrolinx*, and establishment of *RENew Ontario* which provided provincial funding investment for hospitals, schools, roads, bridges and water systems.

Other provincial ministries have also adopted supportive initiatives. The Ministry of Environment amended its Regulation 153/04 under the Environment Protection Act in 2007 to facilitate intensification through redevelopment of brownfield sites. In 2008, the Ministry of the Environment adopted The Lake

Simcoe Protection Act (2008) and Plan (2009) to provide additional policy direction for development and water quality protection in one of the Greater Golden Horseshoe's most vulnerable watersheds. A coordinated land use review to better integrate the Growth Plan, the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan and the Niagara Escarpment Plan was also initiated in 2015, with new plans released in 2017

Official Plan Conformity

Municipalities implement the Growth Plan through a policy conformity exercise, whereby upper and single tier municipalities amend their Official Plans to bring them in line with the policies of the Growth Plan. In two-tiered municipalities, the upper-tier municipality distributes the provincial forecasted growth and intensification and density targets to the lower-tier municipalities. Lower tier municipalities subsequently amend their Official Plans to conform to the upper tier Official Plans and accompanying growth, intensification and density requirements.

In 2012, the Ontario Growth Secretariat (OGS), working under the Ministry of Infrastructure, released compliance rates for the Official Plan conformity exercise for single and upper tier municipalities. These rates revealed that by October 2012, all 19 municipalities with an Official Plan had amended their Plans to conform to the Growth Plan for the Greater Golden Horseshoe (MI, 2013, February 14). Two Counties without Official Plans, Dufferin and Northumberland, had instead completed growth management strategies to guide local implementation of the Growth Plan. At the time of the release, only seven of the 19 amended Official Plans were in effect, while the other 12 were under appeal either wholly or in part at the Ontario Municipal Board (MI, 2013, February 14). The Ontario Municipal Board (OMB) is an adjudicative tribunal that is operates independently of the provincial government.

The Official Plan conformity exercise by lower tier municipalities has been significantly slower. At the time of the OGS's 2012 compliance review, less than half of the lower tier municipalities had adopted an Official Plan amendment to conform to the Growth plan (MI, 2013, February 14).

Municipal Administration

Municipal implementation of the Growth Plan also involves actions and decisions by municipal planners and Council to support the policies within their amended Official Plan. Key actions and decisions that influence how the Growth Plan is administered include:

- Municipal councilors' decision-making and adherence to the Plan;
- Municipal funding to support the Plan;

- Municipal planning staff's decision making and adherence to the Plan during the review of development applications;
- Municipal planning staff's development of policies, regulations and incentives that support the Plan; and
- Generation and sharing of knowledge about the plan through relevant studies and communication with stakeholder.

Chapter 6. Case Study Results

Reported obstacles to Growth Plan implementation varied widely between case study regions, from broad policy challenges such as a failure to align Official Plan Policies to the Growth Plan, to specific technical concerns such as anticipated difficulties in achieving density targets. While some obstacles were shared across the three regions, many reported obstacles were specific to the case study region's unique administrative, political, demographic or economic context.

This chapter describes the social-political context of each study region and the means by which the municipalities within each region have managed urban growth to date. Key challenges to Growth Plan implementation as reported by municipal planners and other interview respondents are described, as well as issues identified in media accounts, staff reports and municipal council meeting minutes. Obstacles to Growth Plan implementation and local context are compared to the model of 31 potential or expected barriers to implementation to demonstrate how each case study region faces a unique set of conditions and challenges to managing urban growth. Finally, the chapter examines specific planning examples to answer the question "how are the barriers across the case studies expressed, reinforced and perpetuated within their different planning and implementation environments?".

Waterloo

The Waterloo Region is Ontario's fourth largest urban region with an estimated 2011 population of 507,096 distributed across the three cities of Kitchener, Waterloo and Cambridge, and four townships (Table 11). Regional government in Waterloo emerged in 1973 through a provincial municipal restructuring process that saw the transformation of many county systems to regional governments. Historically, manufacturing played a significant role in the growth and development of the Region, with Kitchener (formerly Berlin) known variously as the "furniture capital of Canada" and the "rubber capital of Canada". Although manufacturing continues to be a significant contributor to the local economy, the region has adapted to broader deindustrialization trends by emerging as a leader in the advanced technology sector. Growth in the 'high tech' sector has occurred largely as a result of a close partnership between the cities and the local educational institutions. The University of Waterloo, in particular, is credited for a good portion of the region's economic success, as a consequence of its culture of "research commercialisation and academic spin-outs" which has helped to create new opportunities as manufacturing jobs declined (Gillmor, 2012; Leibovitz, 2003, p. 2919). As well, the University is the owner of a significant amount of property within the region, upon which it has developed innovation hubs to foster local business and start-up companies (Bramwell & Wolfe, 2008).

Table 11. Distribution of Population across Municipalities, Waterloo Region (Statistics Canada, 2011).

		POPULATION			CONTRIBUTION TO REGION'S GROWTH
GEOGRAPHIC REGION	MUNICIPAL TYPE	2006	2011	% CHANGE	%
Canada		31,612,897	33,476,688	5.9	
Ontario		12,160,282	12,851,821	5.7	
Waterloo Region	Region	478,121	507,096	6.1	100.0
Kitchener	City	204,668	219,153	7.1	49.99
Cambridge	City	120,371	126,748	5.3	22.01
Waterloo	City	97,475	98,780	1.3	4.50
Woolwich	Township	19,658	23,145	17.7	12.03
Wilmot	Township	17,097	19,223	12.4	7.34
Wellesley	Township	9,789	10,713	9.4	3.19
North Dumfries	Township	9,063	9,334	3.0	0.94

As is typical of most mid-sized Canadian communities, the cities of Kitchener, Cambridge and Waterloo, are decentralized and dispersed. Filion, Bunting and colleagues (Bunting & Filion, 1999; Bunting, Filion, Hoernig, Seasons, & Lederer, 2007; Filion, Hoernig, Bunting, & Sands, 2004) point to the suburbanization of manufacturing and other major employers, and a polycentric configuration as the main drivers of the region's low density urban form. Earlier decades saw the downtown cores of Kitchener, Waterloo and Cambridge experience significant population declines caused by the decentralization of residential and commercial growth (Filion et al., 2004). The loss or relocation of industrial employers from the downtown core helped contribute to the decay of the inner cities, particularly in downtown Kitchener. Additionally, the lack of a single urban core as a result of the close proximity of the three urban municipalities has made the region particularly susceptible to both the pressures of dispersion and inner city decline (Bunting & Filion, 1999; Bunting et al., 2007). Compared with larger metropolitan centres, mid-sized cities like Kitchener and Waterloo experienced most of their development during the automobile era and consequently low density development constitutes a significant proportion of their total urban form (Bunting et al., 2007). Finally, the construction of the Conestoga Parkway in the 1960s between Kitchener and Waterloo further accelerated their outward growth by improving access to peripheral locations.

Municipal fragmentation and local government policies have also been implicated with helping to contribute to the region's urban sprawl. For example, The Regional Municipality of Waterloo, which sets policy direction for all lower tier city and township municipal governments, continues to encourage revitalization of the inner cities for each municipality rather focusing on a single central core (Bunting & Filion, 1999). As a result, downtown revitalization efforts in Kitchener, the region's largest urban centre, are challenged by competition for employment and retail in adjacent Uptown Waterloo (English, 2011; Millward, 2006), and nearby St. Jacobs (Millward, 2006).

As a result of outward migration pressures, the region's predominant urban form has been described as having "lower population densities, outward spreading of jobs, retailing and other activities, CBD decline, increased open space, a transportation system that is singularly dependent on auto use, and an overriding demand for residential settings deemed to be 'private' and 'rural-like'" (Bunting & Filion, 1999, p. 268-269). In 2011, the majority of housing stock in Waterloo Region consisted of single detached residences (57%), while apartments accounted for only 25% of the housing stock, followed by semi-detached dwellings and townhouses making up 18% (Statistics Canada, 2012). The proportion of low density housing (single family homes) is greatest in the townships, where 80% of the housing stock is single detached residences. The polycentric configuration of the region's urban areas has contributed to a strong dependency on automobile transportation, with car travel accounting for 88% of all modes of transportation to work. Transit ridership as a proportion of all trips is relatively low (5.4%) and dominated by a large student population (Statistics Canada, 2011).

The region experienced steady population growth slightly above the provincial and national averages between 2006 and 2011 (Table 11). Although a majority of employers are located in the three cities, rate of population growth was higher in the surrounding townships. Township growth contributed to almost one quarter of the Region's growth from 2006 until 2011 as households sought affordable housing at increasing distances from the main urban centres of Waterloo, Kitchener and Cambridge. The greatest proportion of growth was in Woolwich Township, which grew by 17.7% during the five year period. Like many municipalities in the outer ring of the Greater Golden Horseshoe, a significant proportion of the region's growth is due to in-migration from the Greater Toronto and Hamilton Area. Immigration also is a significant driver of growth for the Region – approximately one fifth of Waterloo Region residents are immigrants, making the Region the fifth highest in per capita immigrant population of all Canadian urban areas (Statistics Canada, 2006).

Regional Municipality of Waterloo Growth Management Initiatives

The creation of Waterloo's Regional government in the mid 1970s permitted the development of the first coordinated land use plan for the region as a whole. While early Regional land use planning adhered to conventional low density, suburban residential and commercial development, it also emphasized the preservation of natural areas through the identification and protection of environmentally sensitive areas. These novel efforts, initiated during 1970s through to the 1990s, helped to prevent development in environmental areas of high integrity (Eagles, 1981).

The Regional Municipality was an early adopter of a growth management approach to guide urban planning. In 1998, the Region incorporated a number of policies into its Official Plan to encourage contiguous rather than scattered development, including policies that designated City Urban Areas (CUA) and Township Urban Areas (TUA) as the primary locations for growth and development. In 2001, four years before the adoption of the Places to Grow Act, Regional Chair Ken Seiling, submitted a report to Regional

Box 1. Regional Growth Management Strategy Objectives

- Establishment of a firm countryside line to limit urban sprawl, protect valuable agricultural lands, and maintain our rural character;
- Intensification of the CTC, including the implementation of an LRT system, to leverage capital investment and support the revitalization of our downtown core areas;
- Protection and preservation of our environmentally sensitive landscapes, including our moraine areas, which are vital to the integrity of our water resources; and
- Development of new employment lands in the vicinity of Waterloo Regional Airport to help maintain and enhance the economic prosperity for which our community has long been recognized.

(Source: Region of Waterloo, 2003)

Council titled "Smart Growth and the Region of Waterloo: Planning for Our Future" in which he argued for the need for a urban growth study. The study, to be conducted by the Planning and Works Committee, was to determine: 1) the existing and future development options in the Region of Waterloo, with particular attention to the east side lands under significant development pressures, and 2) current and future needs with respect to land, infrastructure, brownfield redevelopment, environmental protection and enhancement, and the protection of rural and agricultural lands (Seiling, 2011). The report called on the Region to develop a growth management strategy to improve planning for future development and servicing. Approval of the report by Regional Council set a new course for Regional planning that better accounted for the interdependencies between urban growth, protection of agriculture and natural areas and provision of municipal infrastructure.

One outcome of the Seiling report was Regional Council's adoption of a Regional Growth Management Strategy in 2003. The Strategy reflected many of the same objectives as those included in the later Growth Plan for the Greater Golden Horseshoe, including the establishment of firm settlement area boundaries; encouragement of reurbanization, mixed use development and transit oriented development; expansion of transit and active transportation options; and protection of environmentally sensitive areas and agricultural lands. The Strategy also identified higher order transit as a priority for the achievement of growth management goals. Starting in 2004, the Region, with significant funding from the province, commenced a series of technical studies to explore transit options for the Waterloo Region. Light rail transit (LRT) was approved in 2009 by Regional Council as the preferred rapid transit technology, subject to funding. For most Regional planners interviewed, the LRT was considered to play a critical role in the Region's plans for intensification.

An updated Regional Official Plan that conformed to specific policies and targets of the Places to Grow Act and Growth Plan for the Greater Golden Horseshoe was approved by Council in 2010. Council also approved a 2011-2014 Strategic Plan for the Region that identified environmental sustainability, growth management and prosperity, and sustainable transportation as three of the top five strategic objectives to guide the Region's decision making.

Regional planners interviewed for this research embraced the Regional Growth Management Strategy, with more than one planner noting that the Strategy served as a model for the Growth Plan for the Greater Golden Horseshoe. Expertise at the Regional level for the development of Growth Management policies was recognized by the province who seconded a Region of Waterloo senior planner to assist in the development of the province's Growth Plan. A provincial planner from the Growth Secretariat interviewed for this research noted that "...the Region of Waterloo has really shown leadership in their Official Plan Conformity and all of the supporting documents. They've done a lot of urban density work, urban design guidelines – they're really focusing on that. And quality of place".

The Growth Management Strategy and the Regional Official Plan (ROP) feature a number of policies unique within the Greater Golden Horseshoe. First, the ROP mandates an intensification target of 45% and a density target of 55%, making the Region of Waterloo the only upper tier municipality in the Greater Golden Horseshoe to set their targets higher than the minimum targets required by the Growth Plan¹. Second, the ROP provides the policy framework for an Urban Growth Boundary called the "Countryside Line" to reinforce policy restrictions for the expansion of settlement boundaries set out in

¹ In its Draft Official Plan, Region of Peel sets an initial intensification target of 40% but does plan to increase that target to 50% in 2026 (Allen & Campsie, 2013).

the Growth Plan. Developed through a Regional land budget exercise, the Countryside Line reduces formerly available greenfield land for suburban development by 1056 ha. Finally, the ROP clearly ties growth management objectives to the provision of municipal infrastructure, including water and waste water services and a rapid transit service to be implemented in 2017. The Plan directs the Region to prepare and implement a number of infrastructure master plans to support the ROP's objectives, including a Wastewater Treatment Master Plan, a Long-Term Water Supply Strategy, a Water Efficiency Master Plan, a Transportation Master Plan, Transportation Corridor Design Implementation Guidelines, a Cycling Master Plan, and a Pedestrian Master Plan.

To assist lower tier municipalities in achieving intensification targets, the Region assembled a "reurbanization toolbox" to provide information about the Regional policies, projects and tools to encourage intensification. A significant component of the toolbox is the Region-led coordination of intensification efforts through working groups such as the Brownfields Working Group, the Region of Waterloo Home Builders' Liaison Committee, the Reurbanization Community Advisory Panel, and the Reurbanization Working Group. These working groups, comprised of Regional staff, development industry representatives and community members, were considered by a number of staff to be critical in the successful implementation of the Growth Management Strategy. The Region has also adopted numerous incentive programs to encourage intensification, including a Brownfields Financial Incentive Program, Regional Development Charges Exemptions, and Tax Increment Grant Program.

The Region garnered public and lower tier municipal support for the new growth management objectives through a number of outreach initiatives designed to appeal to communities' environmental values and desire for local economic development. A growth management brochure produced by the Region presents the Growth Management strategy as a means to protect the environment and countryside, while developing attractive, vibrant downtowns that would attract investment. The Region also produced Community Building Strategy to model attractive, vibrant streetscapes and denser built forms within Urban Growth Areas under the new intensification framework.

In 2011, the ROP in its entirety was appealed before the Ontario Municipal Board (OMB) by a coalition of land development companies and builders, thus stalling its implementation. Under dispute was the method the Region of Waterloo used for the establishment of a land budget to meet the Growth Plan's intensification targets (s. 2.2.3.1 and s. 2.2.7.2, respectively). The land budget formed the numerical basis and rationale for the dimensions of the urban growth boundary – the Countryside Line – which excluded a portion of the developers' properties for new development over the duration of the Plan. The OMB ruled in favour of the developers' alternative methodology for calculating the amount of land required to accommodate the projected population growth which used past development trends to project

future needs (Stefanko & Sniezek, Jan 21, 2013). As a consequence of the ruling, the urban growth boundary was broadened to include 1,053 hectares for additional development, up from 85 hectares as set out in the ROP (Pender, 2013). Of particular contention in the land budget debate was the issue of future housing needs for seniors and whether or not seniors could be expected to age in place, as argued by the developers, or to transition out of single family homes and into more compact housing, thus freeing up single family housing for young families, as argued by the Region. The Region requested that the OMB reconsider its decision and appealed the decision to Divisional Court. In 2015, the OMB approved a settlement negotiated between the Region and appellants that designated 255 ha of the 1,053 ha under dispute for urban development, with an additional 200 hectares of land to be later designated to meet revised provincial growth forecasts. Also negotiated in the settlement was an agreement to support the Region's land budget methodology for future greenfield calculations (Figure 6).

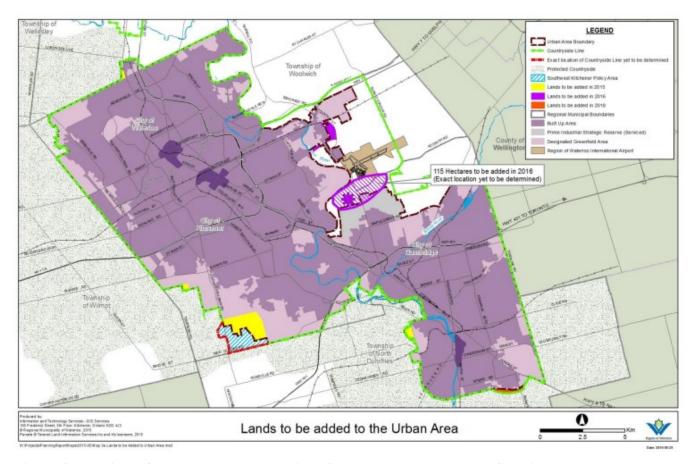


Figure 6. Negotiated Settlement between Region of Waterloo and Appellants Showing Lands Proposed for Urban Expansion (Region of Waterloo, 2015).

Kitchener, Waterloo and Cambridge Growth Management Initiatives

Early planning projects carried out by Waterloo Region's lower tier urban municipalities focused on revitalization of inner city cores. All three cities embraced the development of downtown suburban style malls in the 1960s and 70s as a tool to revitalize the downtowns.

Downtown malls were intended to compete with the draw of large retail malls located at the urban periphery and to entice people and retail activities back to the downtown core, but without exception, the malls failed to achieve their commercial and planning objectives (Bunting et al. 2007; English, 2011). Originally intended to reinvigorate downtowns, downtown malls became a physical and financial obstacle to downtown development (Filion & Hammond, 2009).

Box. 2. City of Kitchener Growth Management Strategy Goals

Goal 1: Enhance our Valued Natural and Cultural Heritage Resources

Goal 2: Create Vibrant Urban Places, building communities where people want to live, invest and be creative

Goal 3: Ensure Greater Transportation Choice

Goal 4: Strengthen Communities improving the social, cultural and recreational network

Goal 5: Foster a Strong Economy

Goal 6: Manage Change in an Effective and Coordinated Manner

(Source: City of Kitchener, 2009)

The lower tier municipalities of Kitchener, Waterloo

and Cambridge have adopted a number of local strategies to manage urban growth in support of the Region's growth management policy framework. In 2007, Kitchener revised its subdivision development approvals process to include neighbourhood design guidelines that promoted development forms better oriented to transit and active transportation. Two years later, Kitchener adopted its own Growth Management Strategy to form the basis for updates to its Official Plan. A significant outcome of the Kitchener Growth Management Strategy was a detailed Growth Management Plan in which the staging of development process was revised to incorporate not just infrastructure requirements, but also broader growth management goals and priorities (Box 2).

Through its Growth Management Plan, Kitchener also committed to monitoring growth management activities and produced an annual Growth Management Monitoring Report. The results of the yearly review inform changes to the Growth Management Plan which is revised on a biannual basis. A summary of the Plan's implementation for 2011 indicated that the density of Kitchener's Urban Growth Centre had increased from 120 residents and jobs per hectare (RJs/ha) in 2001 to 131 RJs/ha in 2008 to 151 RJs/ha in 2010 (City of Kitchener, 2011). The monitoring plan also identifies services and planning instruments, such as Infrastructure capacity, and zoning bylaws that are incompatible with the goals of the plan and outlines actions to address the deficiencies.

In addition to a Growth Management Plan, Kitchener has also adopted a number of innovative approaches to encourage intensification, including a development charge system that provides a truer cost accounting for suburban development. Development charges for suburban residential developments in Kitchener are as much as 74% more than development fees for central neighbourhoods while the differential for non-residential suburban development is even higher at 157% (Thompson, 2013).

Although the City of Waterloo has not conducted a comprehensive Growth Management Strategy, it has initiated a number of projects since the early 2000s that have contributed to an overarching policy direction for intensification. Constrained by a shortage of greenfield, the City carried out a Height and Density Policy Study (City of Waterloo, 2002) and corresponding Official Plan Amendment (OPA #54) to identify intensification priorities for nodes and corridors. To support intensification, a Core Area Infrastructure Assessment study carried out in 2011 identified potential water, wastewater, stormwater, and transportation servicing constraints and areas for strategic capital spending (Stantec Consulting Ltd., 2011). Building on these studies, the City's updated Official Plan directs high and medium density development to locate around transit corridor and nodes, pedestrian-oriented design guidelines, and the development of complete communities including encouraging the location of key services and retail in neighbourhoods to minimize travel (City of Waterloo, 2012). As well, the City adopted a Community Improvement Plan, Official Plan amendments and design guidelines for the residential student community surrounding the Universities to guide the transformation of the former low density residential area to a higher density, mixed use student community.

The City of Cambridge retained a consulting firm to develop its Growth Management Strategy in 2009 (Hemson Consulting Ltd., 2009). This strategy forms a key part of the City's new Official Plan, which was adopted in 2012 to conform to the Growth Plan for the Greater Golden Horseshoe (City of Cambridge, 2012). The City's growth management activities emphasize revitalization of the core areas in its 3 village centres and the encouragement of high quality urban environments through a Heritage Masterplan, streetscaping and urban design guidelines. Facing a historically strong market for suburban style development and challenges associated with downtown decay, the City has focused on downtown revitalization as a critical first step maximizing intensification opportunities.

Township Growth Management Initiatives

Prior to the Growth Plan's release in 2006, few of the Region's four townships had undertaken planning initiatives to manage growth. While some townships had carried out growth studies, such as Woolwich Township's Growth Strategy and Master Servicing Study for the developing villages of Elmira and St. Jacobs (Township of Woolwich, 1993), the primary purpose of these plans were to ensure the

orderly staging of development in greenfield areas rather than to plan for growth through compact, transit supportive and mixed use development.

By 2014, as much as four years after the adoption of the Regional Official Plan and eight years after the release of the provincial Growth Plan, none of the four regional townships had completed a full review or amendment to bring their Official Plans into alignment with the higher level plans. In planning reports to their local Councils, at least two municipalities cite the flux in provincial planning and the Regional Official Plan appeals as the reason for the delay in carrying out the conformance exercise. Planning capacity, however, may be a more significant reason for the townships' failure to adapt local Official Plans to the Growth Plan, with most townships employing only a single full time planning staff person. In the fall of 2012, the Township of Wellesley sought interim planning assistance from the Region of Waterloo to assist in the amendment of its Official Plan to bring it into conformance with the ROP and Growth Plan. A similar request for interim planning assistance was submitted by North Dumfries in February of 2013. A report to Council outlining the request from Wellesley noted that in the past the Region had frequently embarked on planning assistance for the townships.

Barriers to Growth Management in the Waterloo Region

Waterloo media reports, planning documents and interview respondents identified 18 unique barriers to growth management implementation (Appendix C; Figure 7) - fewer than those reported for Simcoe (27) or Peterborough (23). Of the 18 barriers, the barrier referred to as "unsupportive OMB rulings" was not identified in the original model of expected barriers. The challenge associated with unsupportive OMB rulings pertained to the decision by the OMB to uphold development industry interests in an appeal of the Regional Official Plan. Unique physical conditions as they related to planning constraints associated with the region's polycentric configuration, environmental features and land availability that challenged the achievement of density and intensification targets were also identified. These physical conditions were interpreted as part of the community's local context.

Barriers reported by at least 10% of interview and document sources in the Waterloo study region are presented in Table 12 and a relational model of these barriers is presented in Figure 7. A total of eight key barriers were identified, ranging from societal scale barriers such as consumer preferences, to artifacts such as local plans and policies. Lack of commitment to growth management objectives by the development industry was most frequently reported, followed by consumer preferences for low density suburban form. Unsupportive rulings by the Ontario Municipal Board was found to link directly back to the development industry's lack of commitment to growth management, and served to reinforce the existing built form. NIMBY, auto dependency, development industry experience, and unsupportive

engineering and planning standards were frequently described barriers that were found to further reinforce the existing built form. The physical aspects of the local context were found to present a number of technical challenges to municipal planning efforts.

An additional barrier – high cost and complexity to retrofit the existing built form - was identified as a key barrier even though it was not described in 10% of the data sources. The barrier was identified through a critical evaluation of the local contextual and historical information, which revealed that it served as an intermediary barrier through which developers' insufficient experience or knowledge to build alternatives reinforced the region's prevailing low density built form. A critical review of the local development industry discourse also revealed that developers demonstrated a high level of concern and avoidance of infill projects that may result in NIMBY-related political action, which they felt would lead to increased project cost, duration and complexity. This additional barrier is included in model presented in Figure 7.

Table 12. Waterloo Case Study Area: Key Barriers to Growth Plan Implementation.

BA	RRIER TYPE	BARRIER
A	Local Plans and Policies	Unsupportive engineering and planning standards/policies
A	Built environment	High cost and complexity to retrofit existing low density built form
A	Federal and Provincial Plans and Policies	OMB rulings inconsistent with Growth Plan objectives
P	Characteristics of Developers	Development industry not committed to growth management objectives
P	Characteristics of Developers	Insufficient experience or knowledge to build alternatives
S	Consumer Preferences	Preference for low density suburban form
S	Property Ownership and Rights Advocacy	Presence of strong NIMBY lobbying against infill and intensification
S	Consumer Preferences	Auto dependency and absence of alternative travel options
	Local Context	Unique physical conditions (e.g. polycentricity) challenge intensification

A: Artifact; P: Planning Environment; S: Societal Environment

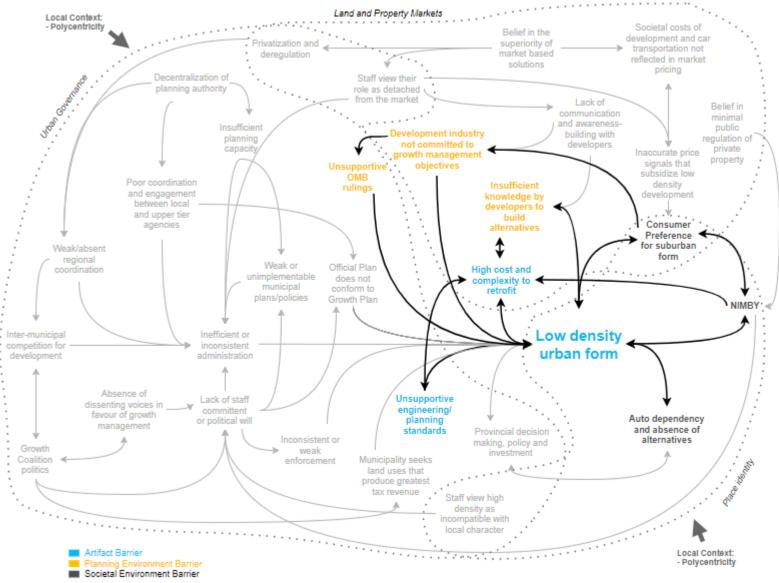


Figure 7. Waterloo Case Study Area: Model of Key Barriers to Growth Plan Implementation. Bold text indicates key barriers identified in interviews and planning/media documents. Arrows denote positive or reinforcing relationship.

Model of Barriers to Growth Management for Waterloo

The Waterloo model of barriers to growth management was found to emphasize a network of obstacles associated with the Waterloo's land and property market institution. This network was characterized by disparate objectives between planning agencies, the development industry and consumers. Interview respondents, media accounts and planning documents described the local planning context as dominated by consumers with a strong preference for suburban development and a reluctance of developers to provide alternative urban forms. Reinforced at the societal environment, planning environment and artifact scales, these barriers challenge local and regional efforts to create the market conditions necessary to encourage desirable intensification projects and constrain growth at the urban peripheries.

Characteristics of Developers/Development Industry

Development industry characteristics comprised the most frequently reported theme obstructing municipal planners' efforts to manage growth in the Waterloo study region. Key characteristics included a limited commitment by many developers to growth management objectives and a lack of knowledge and experience related to redevelopment and infill projects.

A number of interview respondents recognized the challenges to growth management presented by development industry as stemming from a broader, self-reinforcing land and property market system. One planner described this system as fueled by a network of private firms and individuals that share in the economic returns of greenfield development:

"I think that the one challenge we have, the one obstacle is just our whole system of land economics, the way it is now. There's a huge growth industry or development industry that is continuously trying to bring land on stream -- greenfield development -- and the system promotes greenfield development because it's cheaper to develop land in the countryside than to redevelop land in the City. There's no public opposition to speak of, there are no neighbours to complain, there's no contaminated sites, there's no intensification/redevelopment issues. It's just greenfield, [a] fairly simple type of development. You've got, in most cases, willing farmers and landowners who are willing to sell their land and you've got a profit for quite a bit of money, actually. You've got developers willing to buy it..." (Planner, Upper tier municipality).

While the imperfection of the land and property market system was a common obstacle described by participants from all case study regions, Waterloo planners specifically emphasized supply side challenges as a significant barrier to achieving transit-supportive and mixed use urban forms. Planners from the Cities of Kitchener and Cambridge reported that, despite significant public investment to incent downtown development such as infill, local developers continued to be reluctant to take on reurbanization projects, brownfields and even higher density developments in more suburban locations. Local developers were described as either unwilling or lacking the capacity to tackle significant infill projects, resulting in the need for planners to actively "sell" reurbanization projects to development firms from larger urban centres such as Toronto. This experience was echoed by a consulting planner and member of the Waterloo Chapter of the Ontario Homebuilders Association:

"The Homebuilders [Association] are trying to drive home to our builder members that they really should be looking at [reurbanization opportunities], even trying to float opportunities out in front of them: "ok, you don't have a lot of inventory...you might want to look at this redevelopment opportunity". And I'm telling you, there is a lot of resistance. When you've been doing the same thing fairly successfully for 20 years, you get this extreme reticence about taking on anything different. It's scary to these guys and if we're not seeing uptake from the local industry, my only option as a proactive individual is to go to people in the GTA, Oakville, Burlington, Hamilton, London, developers who have successfully done reurbanization and start to bring opportunities to them. And frankly I think that's the way it's going to go. I really do" (Consulting Planner and Ontario Homebuilder Association member).

Development industry representatives further reported a reluctance to undertake reurbanization or infill projects because they were more politically contentious and could lead to a complex public and political process that increased the costs and timing of a development. High cost and complexity was directly and positively associated with absence of supportive Official Plans and zoning bylaws, NIMBY political advocacy, which could delay or threaten planning approvals. One home builder association member summarized this perspective in his statement,

"You know, I'd rather deal with staff on all of those niceties of urban design through a process that I understand and can control. Because when it's in the public realm, there's no control" (Consulting Planner and Ontario Homebuilder Association member).

Limited greenfield land supply was identified by planners as an important factor in the developers' willingness to undertake reurbanization projects. Planners in the City of Waterloo, where designated greenfield lands were nearly exhausted, felt that their limited land supply was a catalyst for the City's early adoption of strategies to promote infill and compact growth and developers' willingness to initiate reurbanization projects. However, for other communities where greenfield lands were abundant and land prices were on average lower, municipal planners felt that developers had little incentive to build more efficient, compact urban forms:

"All of the zoning provisions, approvals processes, financial incentives that municipalities can provide, really where it's going to be effective for the most part, is where land prices are high. And we're not in that position in [this city]. Land prices are still quite reasonable, relatively speaking. And so, there's still interest in developing single detached, semidetached houses. Yes, there is more of an uptake for townhouses and different types of housing, but we're still not fully evolved to getting to the point where the demand is there and high land prices are really forcing those issues for good design and innovation" (Planner, Lower tier municipality).

Some planners noted that in a number of cases, the developers of reurbanization projects lacked the incentive to adopt a high standard for urban design, which in turn reduced consumer demand for these types of projects. This was particularly a problem of builders "who want to put up the brick and the mortar and get out as quickly as they can" (Planner, Upper tier municipality). High quality design was considered critical for the success of redevelopment projects, both as a means to overcome consumer resistance to downtown living, and also to showcase high quality redevelopment for others in the development industry. Poor urban design combined with a failure of the development industry to innovate was identified by planners as a key reason for consumer rejection of higher density urban forms. Such developments, some respondents argued, may have increased the density of the downtown in the short term, but actually decreased livability and choice in the long term:

"...In our area [an important obstacle confronting growth management] really was a lack of choice. We had apartments. I don't know if you're familiar with this area, but the apartments that were built up until about 7 years ago - they were built I guess in the 70s and 80s - and they really weren't desirable tenure for more affluent people or people that have families" (Planner, Upper tier municipality).

"So, I think the lesson we learned is smart growth is more than just putting bodies in urban areas. It has to be done right, so you have to design the buildings right and...certainly the

role that the City can play, the City has to play a much stronger role in terms of what we think is an acceptable redevelopment. Otherwise if you just build a whole series of these [poorly designed apartments], you add people but you don't actually make the area seem more desirable or any more livable, which counteracts exactly what you're trying to do with smart growth" (Planner, Lower tier municipality).

The importance of careful design was echoed by a member of the Waterloo chapter of the Ontario Homebuilder Association, who identified a mismatch between the forms of housing being built with the needs and preferences of an aging population:

"I don't believe that we as builders are necessarily building the right product to entice those people and give them a viable alternative to the single family home. So I think that's the challenge that's before us, and we've been working with the Region pretty closely on this, and the question is: "are people going to age in place or are they not?" If they are not, what kind of housing form do they want to move to? And that I don't think has been adequately answered" (Consulting Planner and Ontario Homebuilder Association member).

Local Plans and Policies

While development industry respondents conceded that there was some resistance by builders to build compact forms and infill development projects stemming from a lack of organizational capacity and experience, they pointed to municipal policies as a challenge to achieve well designed, compact urban forms. Outdated or inflexible municipal policies, such as transportation and parking policies, for example, increased costs, delays, and sometimes prevented a project from being brought to market. Speaking generally about new urbanism projects in the Greater Golden Horseshoe, one developer noted:

"Well, I'd like to think that we were probably the first developer in southern Ontario who employed New Urbanism, without going to Duany and all those other guys. We embraced true communities. And people loved it... we had rear lane garages which was a very common grid pattern in some of these older communities. Look at Rosedale, Leaside, the Beach, those communities have those kinds of things. It wasn't rocket science. What was rocket science was trying to tell the public works officials and all those other people that you didn't need to have a 20 m right of way. You could get away with a 12 m right of way, and on street parking" (Private developer).

Another developer noted that inconsistencies between municipal planning and engineering staff and the lack of authority of planning policies over other standards created significant challenges when attempting to build more compact forms:

"So what we're finding is that the whole machinery of land use approvals is still a bit mixed up. The works people don't agree with the planners – works people want too many cars, too many parking spaces, roads that are too wide – just standards, standards, standards. Any they can't be flexible. The planners sometimes want to go somewhere with a new idea but they don't have enough authority within the municipality to make it happen. So you start down the road with them, and you get into the commenting, and they disappear and you're left with the engineers. We're finding a real problem there" (Private developer).

A number of Waterloo area planners agreed that some work remained to bring all relevant municipal policies and standards into conformance with growth management objectives. As one respondent noted:

"It's like telling people to quit smoking but then you're still handing out free cigarettes. Our policies are a little bit like that. When we're developing areas, there's requirements on having a garage and the size of your driveway. Apartment buildings – there are very specific requirements on how much parking you have to provide. Shopping malls, it's the same thing. And I'm talking a lot about parking. There are other examples aside from that" (Planner, Upper tier municipality).

Waterloo planners described a number of municipal initiatives focused on helping mitigate the pressures from private firms for prevailing urban forms, including regulatory measures such as zoning and urban design requirements. Both upper and lower tier planners also cited incentive programs as important tools to assist them in encouraging types of development that conform to Growth Plan policies. The Region of Waterloo, in particular, undertook a reorganization of the Planning Department into *Reurbanization* and *Greenfield development* branches to permit staff to specialize in these areas and develop working relationships with key market players. Moreover, the Region established various facilitation groups, such as the reurbanization working group and a Home Builders' Liaison Committee, comprising key stakeholders in the reurbanization process to foster dialog between municipal government and developers regarding the challenges to infill development.

Inter-organization Relations: Vertical Inconsistency

The role of the OMB in reinforcing development industry interests was identified as a key barrier by municipal planners, elected officials and interest groups in the months following the 2013 OMB decision that failed to support the Region's Official Plan growth management framework.

The OMB ruling in favour of expanding the amount of developable land by over 1000 ha posed significant challenges to the Region in its efforts to establish a planning framework supportive of compact growth. First, with an OMB ruling that supported policy development based on past trends rather than the goals and targets of the Growth Plan, municipal capacity to plan for future development that differs from urban forms and patterns of the past was diminished. In particular, the reliance on trend data in the calculation of land budgets to accommodate future development presents significant challenges when the achievement of planning goals requires a shift in behaviour. This contradiction was noted in an open letter published by a consortium of urban planning academics from the University of Waterloo shortly after release of the OMB decision:

"We reject the idea that our future housing (or transportation, water, or any other publically provided goods) needs are to be based primarily upon past trends. Trends in demand are shaped by the perceived choice set and the quality of alternatives for consumers. Planners do, and should, make choices to shape that choice set of commodities — especially housing — in order to achieve agreed-upon goals for how, where, and when an urban landscape should evolve. In fact, the very goal of Planning is to understand (through much public input) what the future community should be, not what it will be without any action. With this understanding, planners (and engineers, politicians and society as a whole) take steps to bring about change so the community can realize its goals" (Casello et al., 2013).

Second, increasing the amount of developable land, as permitted by the OMB decision, would serve to hamper the Region's efforts to meet the Growth Plan's intensification targets. Restriction of land supply through the use of urban growth boundaries can encourage developers to take on infill development projects and has been shown to be correlated with increased development densities (Yin & Sun, 2007) and a reduction in the rate of urban expansion (Howell-Moroney, 2007; Paulsen, 2013). Accordingly, Regional planning staff identified the urban growth boundary as an integral component of their overall growth management plan. As one Regional planner stated, "unless you can stop sprawl and prevent that continual outward expansion into the countryside, you're never going to get the conditions needed for redevelopment and intensification to promote smart growth."

Third, the OMB ruling challenged the Growth Plan's key objective to effect change in Southern Ontario's urban form by questioning the outputs required over the Plan's time horizon. The ruling concluded that municipalities were only obligated to plan for Growth Plan density targets, but did not need to actually achieve these targets over the Growth Plan's time horizon. In defence of its decision, the OMB cited the wording in Section 2.2.7.2 of the Growth Plan which states that density target "will be planned to be achieved" but for which no specific date for completion was identified. Using this interpretation of the Growth Plan planning horizon, the Board failed to find fault in the developers' land budget methodology, which relied largely on the development of apartments to achieve required densities, but which would not be fully built within the planning time frame of the Growth Plan (Stefanko & Sniezek, Jan 21, 2013).

Reliance on apartment buildings to achieve density requirements may ultimately result in lower than expected densities due to possibility that the high density developments may never be developed. This problem was described by one interview respondent, who noted that in the past, builders had been reluctant to construct the higher density portion of their approved developments:

"You know, if you look back historically on plans of subdivision that have been approved over the past 20 years, you're going to see these blocks of land that are undeveloped in those. Those are the high density sites. As developers, we were hammered over the head saying "That's ok, we'll approve all these singles, but boy you put a highrise site there". We call them orphaned apartment sites because everything else developed except that. Why? Because there was no market for it" (Consulting Planner and Homebuilder Association member).

Critics of the OMB's interpretation of the Growth Plan's planning horizon argued that not only did it undermine the Region's and area municipalities' efforts to achieve Growth Plan density targets, it contradicted the intent of the plan as set out in Section 1.4 that the "...Plan informs decision-making regarding growth management in the GGH. It contains a set of policies for managing growth and development to the year 2031. While certain policies have specific target dates, the goals and policies of this Plan are intended to be achieved within the life of this Plan" (MPIR, 2006). In support of this critique, the province of Ontario indicated that it would defend the Region's position in an appeal of the decision to the Ontario Divisional Court (Canadian Broadcasting Corporation, 2013; Pender, 2013).

In an effort to avoid the uncertainty of the appeal process, the Region and the appellants reached a compromise on the amount of lands planned for urban expansion and the appellants agreed to accept the Region's land budgeting methodology going forward. The negotiated settlement between the Region and

appellants may represent a growing willingness by local developers to work within a new land use planning framework, but it did not alter fundamental challenges presented by OMB and its interpretation of the Growth Plan planning horizon and land budgeting.

More recently, the Ontario government has responded to calls for OMB reform by proposing legislation (Bill 139) that would see the replacement of the OMB with a new tribunal and process that gives greater weight to local municipal decision making. Bill 139 would limit the use of "de novo" hearings and restrict the tribunal's authority to overturn the decisions of a municipal council. The tribunal would no longer have the authority to decide whether a municipal decision represents, in its view, the best planning approach, and rather would be limited to deciding whether that municipal decision is one of a range of approaches that are consistent with local and provincial policy. Appeals could only be made on basis that the municipal decision did not conform to provincial policies or local plans. Bill 139 would also prohibit appeals of provincial approvals of official plans and official plan updates. If enacted, the bill may help prevent future appeals of plans, like the Regional Official Plan, that are approved by the province. However, with the negotiated settlement between the Region and the appellants already in effect, the bill will have no impact on the rural lands now planned for urban expansion.

Consumer Preferences and Property Ownership and Rights Advocacy

Municipal planners and developers identified consumer behaviours and preferences as another important obstacle to growth management in the Waterloo study area. Most respondents recognized the mutually reinforcing relationships between consumer preference for low density suburban form and NIMBY, auto dependency, and a lack of alternative transportation and housing options. Development industry respondents pointed to a prevailing preference for suburban style housing as the primary reason for their industry's reluctance to adopt infill and more compact residential development projects:

"We're very responsive to our customers so if somebody says to us "Here's what I want", we'll try to find a way to do it. Unfortunately today, here's what they're saying "I want a bungalow on a 60 ft lot... that's where we've got the disconnect. Between policy and delivery of product on the ground. And I don't think that's necessarily ever going to go away. I understand where the bureaucrats are coming from and a lot of the salient ideas behind smart growth and the growth plan are good, but no one has really gotten down to the brass tacks of how we educate the consumer. Because that's what drives us." (Consulting Planner and Homebuilder Association member).

Auto dependency was identified by many Waterloo planners as a significant factor that reinforced consumer preferences for low density development. Planners noted the influence of transportation on land and property markets and pointed to the past imbalances in federal and provincial investment that favoured car-oriented transportation infrastructure compared with other modes of transportation. While planners identified municipal efforts to reduce auto dependency, including a significant investment in Rapid Transit and public awareness campaigns (e.g. Central Transit Corridor Community building strategy), most recognized that a shift in investments and market pricing would be required to fundamentally shift behaviours and preferences:

"I'm not sure how you can address that through policies but as long as people have access to cars and it's cheap to drive, fuel is cheap and you have a federal/provincial government that just recently bailed out the auto industry - as long as you have a system that continues to promote automobile use over other alternatives, like transit, people will always have any easy way to get around and as long as you have those conditions, it's really difficult to integrate transportation and landuse planning because it doesn't matter where you build things because people can just hop in the car and get there" (Planner, Upper tier municipality).

"Money and convenience tend to be the most important in terms of impacting peoples' way of life. So until it costs them more to live a suburban life than it would an urban life, they are less likely to consider a smart growth kind of lifestyle... To me a critical part of smart growth would be looking at the highway system. We keep expanding our highway systems and making them bigger and bigger, which all we're doing is making it more convenient for a suburban lifestyle. If it was expected that in Waterloo Region that you're going to sit on the highways for an extended period of time, you're going to be more likely to consider other options" (Planner, Lower tier municipality).

Public opposition to infill development, fuelled in part by a preference for the low density urban forms, was described by municipal planners across all three study regions as a significant challenge to implementing the Growth and specifically the Plan's intensification targets. Waterloo planners described public education and awareness building as comprising an important part of their work to implement Growth Plan policies. Both the Region of Waterloo and the City of Cambridge, for example, developed visualization materials to strengthen community understanding of the implications of higher densities. Despite public awareness campaigns, however, Waterloo planners communicated their frustration regarding ongoing public opposition to urban intensification policies:

"...We have policies in place, we have....the City of Waterloo – they have a height and density study or Official Plan Amendment that was put in place, so it's gone through Council, it's gone through a public process, that says that 25 stories can go in certain core areas, and yet when an actual project comes on stream, you still have the public coming out and saying "we don't want 25 stories". Even though it's almost a right, now, because it's part of the Official Plan. So NIMBYism continues to be an issue" (Planner, Upper tier municipality).

Developers also identified NIMBY as one of the largest barriers to their adoption of intensification projects. While acknowledging the value of municipal incentive programs, one developer identified the potential for public opposition as having a more significant influence on their undertaking of infill projects. NIMBY-based political lobbying was described as adding uncertainty expense and time to the development process. In this context, unsupportive local plans and policies served to reinforce avoidance of infill and intensification style development by providing opportunities for property owners to appeal to Council. Out of date zoning bylaws that failed to reinforce the direction provided in the Official Plan, for example, could require a developer to seek a bylaw amendment which in turn could open a project to an expensive and politically risky public process:

"You know you have to start creating those environments like Waterloo did very successfully, I think... And that's what I've been saying to all these municipalities, I've been saying 'never mind your stupid financial incentives that you stew over about giving the industry development charge exemptions or brownfield incentives, forget about the money, create a policy environment'... If they're serious about this stuff...do like Waterloo did, put the policy in place first so that I don't have to take the risk of going to the public on it." (Consulting Planner and Ontario Homebuilder Association member).

Local Context: Polycentricity

Although not described by interview respondents, a number of planning studies reported the multinodal nature of the Waterloo Region as presenting a significant challenge for managing growth (Bunting & Filion, 1999; Bunting et al., 2007). In contrast to Simcoe and Peterborough in which most urban areas are physically isolated from one another, the Waterloo Region's three urban areas form a large contiguous urban community. Despite the presence of a strong regional government, local planning for the intensification and growth of these distinct but contiguous urban communities was described as introducing horizontal inconsistency, which in turn created a complex and sometimes counterproductive development environment. Retrofitting the low density, polycentric urban region to accommodate higher

order transit and reduce auto dependency has required a high level of investment and intervention from the Region (Casello, 2015; Windsheimer, 2007).

The presence of three independent, small to medium sized urban areas was also found to help perpetuate the desire of each community to retain its small town character and reinforce opposition to intensification and transit investment. Economic development promotional materials and pledges by elected officials, for example, revealed that each city self-identified as a city with a small town feel and big city amenities (e.g. Top 10 Reasons to Live in Waterloo Region, City of Kitchener website, 2015). The focus by individual communities on maintaining a "small town feel" has helped to de-emphasize regional scale planning issues, creating challenges for coordinated management of growth (Urban Strategies Inc, 2001, Pembina Institute, 2007):

"The Region of Waterloo is torn between the desire to be a small community and the economic reality of the urban region. There is a need to plan for one urban area, however, current plans are for three cities of 100,000 population per city. In reality, the Waterloo Region constitutes one large city of close to 500,000 people. A major effort is required to educate a community that still thinks of itself as a small city with a population of 100,000 (Urban Strategies Inc, 2001).

While acknowledging the presence of a high level of coordination and cooperation between the Region and area municipalities, some Waterloo area planners noted the existence of different visions for growth management implementation between Regional and Area Municipal Councils. As one Regional planner described:

"I would have to say that this Region has been quite accepting [of the Growth Plan]....there are times when, if you talk to the development industry...there are still some concerns because at the Area Municipal level, when they take a development application for approval to the Council, they're still worried that something is going to go sideways. That one of the residents is going to capture the ear of the politician and cause them to pause or have doubt" (Planner, Upper tier municipality).

Summary

The Waterloo case study demonstrated a conflicted planning environment in which planners, developers and the public presented different viewpoints regarding the optimal built form and how future growth should be managed. Unique to the region was a strong institutional logic shared by regional and most local planning agencies that favoured growth management objectives and the development of

stringent regional policies to manage growth. Despite significant efforts to create a supportive policy framework for growth management, the Region faced significant push back from key players in the development industry who were supported by an OMB decision that conflicted with the Growth Plan goals and objectives. Further reinforcing the local development industry's preference for lower density, greenfield development was consumer demand for suburban development driven by preferences and auto dependency, NIMBY, higher cost and complexity to retrofit low density urban areas and a lack of experience by local development industry professionals to build more compact forms. The polycentric design of the region also played a role in creating technical challenges for planners in terms of coordinating and planning for intensification, although the impact of these technical barriers were tempered by a regional and local planning agencies' general support for growth management principles and a capacity to seek creative solutions.

Simcoe

Located north of Toronto and the Oak Ridges Moraine, Simcoe County and the separate Cities of Barrie and Orillia together comprise what is described in this research as the Simcoe case study area. While comparable to the Waterloo region in population size (443,911 in 2011), Simcoe's population is more widely dispersed with almost one third of the population located within Barrie, the region's main urban centre. The remaining two thirds are distributed across the 100 small towns and villages that comprise the City of Orillia and 16 town and township municipalities (Table 13). Unlike regional governments found in Waterloo Region and other more urban regions of the province, Simcoe possesses a county-city governance system in which municipal affairs are administered independently by county and city municipalities. The Cities of Barrie and Orillia are single tier municipalities which govern their own affairs, while Simcoe County provides a range of municipal services for 16 lower tier town and township municipalities, including social services, waste management, County roads, and more recently, land use policy planning. Lower tier municipalities in the County are each responsible for providing water, waste water and development services.

Table 13. Distribution of Population across Municipalities, Simcoe Case Study Area (Statistics Canada, 2011).

		POPULATION			CONTRIBUTION TO REGION'S GROWTH	
GEOGRAPHIC REGION	MUNICIPAL TYPE	2006	2011	% CHANGE	%	
Canada		31,612,897	33,476,688	5.9		
Ontario		12,160,282	12,851,821	5.7		
Simcoe Case Study Area		420,737	443,911	5.5	100%	
Single Tier Municipalities						
Barrie	City	128,430	135,711	5.7	31.42	
Orillia	City	30,259	30,586	1.1	1.41	
Simcoe County						
Bradford W. Gwillimbury	Town	24,039	28,077	16.8	17.42	
Wasaga Beach	Town	15,029	17,537	16.7	10.82	
Collingwood	Town	17,290	19,241	11.3	8.42	
New Tecumseth	Town	27,701	30,234	9.1	10.93	
Innisfil	Town	31,175	33,079	6.1	8.22	
Midland	Town	16,330	16,572	1.5	1.04	
Penetanguishene	Town	9,354	9,111	-2.6	-1.05	
Essa	Township	16,901	18,505	9.5	6.92	
Tiny	Township	10,754	11,232	4.4	2.06	
Springwater	Township	17,456	18,223	4.4	3.31	
Severn	Township	12,030	12,377	2.9	1.50	
Oro-Medonte	Township	20,031	20,078	0.2	0.20	
Tay	Township	9,748	9,736	-0.1	-0.05	
Adjala-Tosorontio	Township	10,695	10,603	-0.9	-0.40	
Ramara	Township	9,427	9,275	-1.6	-0.66	
Clearview	Township	14,088	13,734	-2.5	-1.53	

Early development in Simcoe capitalized on the abundance of farmland and natural resources such as timber, as well as the region's proximity to Georgian Bay. Although agriculture continues to play a significant role in the local economy, many of the region's small rural communities now serve as bedroom communities for larger centres within Simcoe and beyond that offer a more diverse range of employment. Tourism, retail, service industries and manufacturing comprise the majority of employment in the region. One of the County's largest employers is an automobile manufacturing plant located in the small town of Alliston. Municipalities located on the shorelines of Georgian Bay and Lake Simcoe, such as Wasaga Beach and Collingwood, are particularly oriented to tourism and service-related industries, with recreation and lifestyle developments comprising a large percentage of their local development

activity (Lapointe Consulting Inc., 2006). Once a bedroom community for Toronto, Barrie is increasingly providing employment for its residents and the surrounding area. A full 63% of Barrie residents are employed in Barrie, with an additional 9% of residents commuting from Barrie to elsewhere in Simcoe County for employment (Birnbaum, Nicolet, & Taylor, 2004).

The region has experienced rapid population and employment growth in the last 3 decades. Between 2001 and 2006, Barrie was the fastest growing census metropolitan area in Canada (City of Barrie, 2008). Growth has been unevenly distributed, with the majority occurring in southern portion of the region, particularly in the City of Barrie, and more recently, in smaller municipalities such as the Towns of Wasaga Beach and Bradford West Gwillimbury. Northern municipalities, in contrast, have experienced little to no growth in recent years (Birnbaum et al., 2004; SHS Inc., 2007). Population growth in Simcoe, driven largely by in migration from the Greater Toronto Area, has been dominated by households seeking affordable housing and natural amenities (Dillon Consulting Limited, 2006a). Extremely high residential growth rates in Simcoe have tended to coincide with decreased housing affordability in the Greater Toronto area where 2006 average housing prices were estimated to be about \$20,000 greater than average prices in Simcoe (Dillon Consulting Limited, 2006a). That gap has grown steadily, with average 2015 prices for single family homes now differing by over almost \$770,000 (Pigg, June 5, 2015). Proposed expansions to Highway 400, the main highway that connects Simcoe to the Greater Toronto Region, have also contributed to speculation and development, particularly along the highway corridor (Birnbaum et al., 2004). Rapid population growth in the late 1990s and early 2000sled some analysts to declare the region to be Ontario's "new growth frontier", soon to outpace other fast growing suburbs of Toronto (Birnbaum et al., 2004). While Simcoe never did exceed the growth rates of Halton, Peel and York Regions, it was the fastest growing region in the outer ring between 2006 and 2015 (Ontario Ministry of Finance, 2016).

Development in Simcoe to accommodate a growing population and employment has historically been low density and decentralized. The location of large manufacturing plants in small communities such as Alliston and Bradford West Gwillimbury has been a significant contributing factor to the region's dispersed growth, drawing workers from larger cities such as Barrie and Toronto to the more rural reaches of Simcoe County. The growth of lifestyle developments in small shoreline communities to accommodate amenity migrants and retirees has also been identified as a significant driver of dispersed growth, attracting seasonal and full time residents from larger urban centres (Dahms, 1999; Mitchell, 2008). Housing form in the region is dominated by single detached housing (75%) – higher than either the provincial average (56%) or the similar-sized Region of Waterloo (57%) (Statistics Canada, 2011).

A high level of dispersion coupled with low investments in public transit has resulted in a high degree of auto dependency in Simcoe. Less than half (42%) of Simcoe commuters live in the same municipality as they work (Dillon Consulting Limited, 2006a). Public transit accounts for 4.6% of all trips in Barrie, but outside of Barrie, transit usage is low at less than 1% (Planning Department, County of Simcoe, 2011).

Simcoe County growth management initiatives

Long range planning and management of growth was not a County responsibility until the late 1990s when Simcoe County initiated a restructuring process that enabled it to take on a larger role in development and policy planning (Birnbaum et al., 2004; County of Simcoe, 1998). The County's restructuring plan was carried out in recognition of the findings of three earlier provincial task forces which had found that small towns and townships in the County were increasingly challenged in their capacity to deal effectively with growth pressures and provision of an increasingly complex range of municipal services (Spicer, 2013). Lack of coordination among lower and single tier municipalities, coupled with unequal representation on County Council had created the conditions for inter-municipal competition for assessment dollars and boundary disputes. To resolve these

Box 3. County of Simcoe 1998 Official Plan Objectives

- Protect, conserve, and enhance the County's natural and cultural heritage;
- Wise management and use of the County's resources;
- Growth management to achieve lifestyle quality and efficient and cost-effective municipal servicing, development and land use;
- Achievement of coordinated land use planning among the County's local municipalities and with neighbouring counties, district, regions, and separated cities, and First Nations lands;
- Community economic development which promotes economic sustainability in Simcoe County communities, providing employment and business opportunities;
- Protect public health and safety.

(Source: Simcoe County, 1998)

problems, the Consultation Committee for the Ministry of Municipal Affairs recommended that Counties and municipalities share responsibility for land use planning.

In 1998, the County of Simcoe adopted its first Official Plan to provide a more coordinated approach to landuse planning and municipal servicing throughout its area of jurisdiction (County of Simcoe, 1998). Like the Regional municipal systems that had emerged a few decades earlier, lower tier municipal governments in the County system were required to draft Official Plans that would conform to the County's Plan. The County Official Plan was its first policy document to provide a county wide vision for growth, and many of the plan's stated objectives reflected key tenets of growth management, including the need to protect natural resources by directing growth and development toward settlement

areas and recognition of the need for better coordination with the Cities of Barrie and Orillia in planning and service delivery (Box 3).

Despite these efforts, the County's capacity to manage Simcoe's rapid growth effectively was increasingly called into question, leading to concerns about the impact of the region's rapid growth on natural areas, water resources, and municipal infrastructure. Urbanization of the County had led to an increase in urban run-off and effluent from sewage treatment plants and septic systems which, in combination with agricultural run-off, were contributing to the serious degradation of Lake Simcoe's water quality (Ontario Ministry of Environment, 2010; Palmer, Winter, Young, Dillon, & Guildford, 2011). Attempts in the 1980s to mitigate the effects of human activity on Lake Simcoe – particularly urban development and agriculture activities – failed to protect the lake sufficiently from high phosphorus loads. The wisdom of accommodating additional growth in absence of a coordinated plan for water and waste water servicing to prevent further degradation of Lake Simcoe was questioned by provincial agencies, citizen stakeholder groups and a number of municipalities within the urbanizing watershed (Lake Simcoe Environmental Management Strategy (LSEMS), 2003).

The location and form of urban development planned for Simcoe was also a subject of growing concern, leading to accusations that Simcoe was the "wild west" for development issues (Sprawl hits above the belt.). These concerns, raised in a 2004 report by independent urban research organization, Neptis Foundation, called attention to the size and location of developments proposed for Simcoe County and their implications for the management of growth in the entire Greater Golden Horseshoe (Birnbaum et al., 2004). The report pointed to a lack of capacity of lower tier municipalities in the County to plan for and fund expensive municipal water and wastewater servicing that was contributing to a trend toward very large residential and recreational developments in South Simcoe. The report authors argued that the developments were proposed at such a scale as to be able to recoup the costs of providing private water and wastewater servicing and effectively co-opted from the public the discussion about how and where growth should occur in the County (Birnbaum et al., 2004). One such development proposal was a controversial 239 ha lifestyle development and marina proposed for shoreline and agricultural lands at Big Bay Point, a small cottage community outside of the Town of Innisfil's settlement boundaries. An OMB hearing of the case revealed that neither the County nor the Town had planning policies in place to guide the location, size or form of resort developments (Seaborn & Beccarea, 2007).

That same year the County engaged a consultant to conduct a population and employment forecast and a workplan for a comprehensive growth management process. Citing fragmented decision making between the County and separate Cities of Barrie and Orillia as a major problem for future growth management, the consultant concluded that:

"In the absence of a co-ordinated approach to resolving the major growth management issues in the County of Simcoe, it is likely that solutions will be reached through other processes. The outcomes may not be in the best interests of the communities involved. In our view, this is a situation that both the County of Simcoe and local municipalities should have a strong interest in addressing" (Hemson Consulting Ltd., 2004, p. 12).

The "other processes" referred to in the consultant's report was the possibility of provincial intervention into Simcoe's local municipal planning activities to resolve the mounting governance and growth management challenges facing the area. In 2005, with no satisfactory resolution to the growth challenges facing the region, the province of Ontario announced it would guide Simcoe County and the separate cities of Barrie and Orillia through an Intergovernmental Action Plan (IGAP) process that would determine the Simcoe area's capacity to sustain additional growth and to identify opportunities for local governments to manage that growth. In a press release announcing the decision, then Minister of Municipal Affairs and Housing Minister, John Gerretsen, commented that "past governments' piecemeal planning has threatened both the environment and the sustainability of development in Simcoe County... a comprehensive study of Simcoe County's watershed capacity and infrastructure will ensure governments make more informed decisions on future development proposals" (Ontario Ministry of Municipal Affairs and Housing (MMAH), March 10, 2005). The Intergovernmental Action Plan resulted in the commitment of 2.25 million dollars from the province to support a-four phased research program to: 1) study the assimilative capacity of the Lake Simcoe and Nottawasaga River watersheds to accommodate growth and development, 2) assess the capacity of existing infrastructure to accommodate approved growth and development, 3) assess future growth potential, and 4) develop an implementation plan.

The IGAP studies found that Simcoe County, its lower tier municipalities and the separate cities of Barrie and Orillia had collectively approved development in excess of both the County's population targets as set out in its Official Plan, as well as the provincial population forecasts released that year as part of the Growth Plan for the Greater Golden Horseshoe. Enough land had been approved for development to accommodate a surplus of 25,045 to 30,991 people when evaluated against the population forecasts provided by the Growth Plan (Dillon Consulting Limited, 2006b). Moreover, population targets approved by lower tier municipalities were often much higher than the approved targets in the County's Official Plan and the Cities of Barrie and Orillia had overturned their own Official Plan targets through resolutions that permitted additional population (Dillon Consulting Limited, 2006b). The studies also concluded that the lack of a coordinated approach to water, waste water infrastructure and urban development had compromised the municipalities' ability to protect groundwater and surface water

resources and locate development in areas that could be could be efficiently or economically serviced (Dillon Consulting Limited, 2006b; Doyle, 2009). Another consequence of Simcoe's fragmented planning approach, identified by the IGAP, was the challenge facing municipalities in planning for transportation infrastructure, complete communities and transit oriented densities. The study identified a need for better coordination within and between municipalities for the siting of employment areas, improving the balance of employment and residential landuses, and providing county-wide transit (Dillon Consulting Limited, 2006b).

Informed by both the results of the IGAP process and the newly released Growth Plan for the Greater Golden Horseshoe, Simcoe County staff embarked on a process to update its Official Plan. Although the revised County Official Plan was approved by Council in 2008, the Ministry of Municipal Affairs and Housing did not approve the plan within the statutory time frame. The plan hinged on a forecast of 707,000 additional people by 2031 -- 40,000 more than forecasted for Simcoe region by the Growth Plan (County of Simcoe, 2008, modified 2013). Almost three quarters of that growth was assigned by the County to lower tier towns and townships under County jurisdiction, leaving only onequarter for the urban nodes of Barrie and Orillia (County of Simcoe, 2008, modified 2013). In addition, nearly 20% of the projected growth was planned to occur along the 400 corridor immediately south of Barrie. The City of Barrie and York Region, a municipality immediately to the south of Simcoe, were openly critical of the Plan, arguing that it failed to work within the framework recommended by the IGAP and the population allocations of the Growth Plan and that these failures would have negative consequences for surrounding municipalities and the vision of the Greater Golden Horseshoe as a whole. In a report to Council, York Region staff noted the Simcoe County Official Plan's overemphasis on residential development and failure to plan for needed employment development. Moreover, the Plan was structured around intensification targets of 20% rather than 40% for many of its communities, and greenfield density targets of 32 rather than 50 residents and jobs per hectare (Regional Municipality of York, 2008). The appropriation of the majority of the forecasted growth by Simcoe County and the allocation of that growth to small communities within rural areas rather than to larger urban centres incensed Barrie's political officials who issued the press release:

"It has been clear for some time that there are two visions for growth in Simcoe County. The first is the vision of Places to Grow; of compact communities served by transit and other urban services with growth concentrated in and around existing urban areas. Barrie City Council supports this recommendation by the 2006 Inter-Governmental Action Plan and its vision for smart growth in our area. The second vision calls for dispersed growth in rural

areas spread across south Simcoe, as laid out in the County of Simcoe's draft Official Plan, and reflected in the Town of Innisfil's recent OPA's" (City of Barrie, April 28, 2009).

In 2010, with still no Ministerial approval for Simcoe County's Official Plan, the provincial government released a report entitled *Simcoe Area: A Strategic Vision for Growth* and the *Lake Simcoe Protection Act* to protect Lake Simcoe from the impacts of agricultural activities and urban development, including treated municipal sewage effluent. The report provided an alternative planning scenario for Simcoe with the rationale that "Simcoe County has submitted a new Official Plan for provincial decision that, while containing many good policies, needs clearer growth management direction" (Ontario Ministry of Energy and Infrastructure (MEI), 2009, p. 1). Following the release of the vision document, the Ministry of Infrastructure then issued an amendment to the Growth Plan which provided more concrete direction for population and employment growth for lower tier municipalities and the separate cities of Barrie and Orillia (MI, 2012).

Compromising between the Simcoe County's original plans for growth, and the province's desire to constrain growth to identified urban growth nodes, the amendment assigned a greater proportion of Simcoe's forecasted population to Barrie but also allocated additional population growth to Bradford and Alliston and designated new employment areas along Highway 400. The amendment initially called for the County to work with municipalities to define new Interim Settlement Area Boundaries (ISABs) based on a 20 year land budget reflective of the new municipal population and employment forecasts, but this requirement was eventually dropped after Simcoe County and municipalities raised concerns about developments that were already approved for lands outside of the ISABs and potential legal challenges (Patterson, 2011; Watt, 2012). Moreover, the Amendment permitted Simcoe County to accommodate a population in excess of the provincial forecast to a maximum of 20,000 people, provided that the development to accommodate the additional population: 1) met intensification targets and density targets, 2) was located on lands for urban uses as of January 19, 2012, and 3) met provincial servicing policies and the Lake Simcoe Protection Plan, 2009.

While directing a greater proportion of Simcoe's growth toward urban municipalities such as Barrie and Collingwood, the Amendment was anticipated to permit a good number of previously approved developments to proceed and was strongly criticized by environmental groups, planners and a past mayor of Toronto for undermining the objectives of the Growth Plan (Campaign Lake Simcoe, 2010; Malcolmson & Donnelly, 2012; Sewell, 2013). Senior planner for Ontario's Ministry of Municipal Affairs and Housing, Victor Doyle, argued that the changes presented in the Amendment opened up new, unserviced lands for development in absence of a demonstrated need for new land and without the necessary studies to identify the capacity of Lake Simcoe and Nottawasaga River to accommodate

additional water and waste water servicing (Doyle, 2009). In a letter to the Ontario Growth Secretariat, Doyle stated:

"Currently, Simcoe County simply does not have the legislative authority or staff capacity or experience to manage sewer and water systems. Even with legislative authority, it will be some time prior to it being able to deal effectively with the existing, let alone proposed expansion to new systems. There should be no further land use approvals for urban expansions or major urban uses requiring sewer and water (ie. the employment areas) on inland lakes and rivers beyond those currently in place (with the exception of Barrie and [sic]) until the County is provided with this authority" (Doyle, 2009).

Simcoe County and many of its constituent municipalities begrudged the greater provincial direction provided for Simcoe under the Growth Plan Amendment, seeing it as an infringement on local autonomy and decision making (McCormick, 2011b). In discussing the proposed Amendment, Chief Administrative Officer of Ramara Township, Rick Bates, summarized the perspective shared by many Simcoe municipalities: "For those of us who have worked in planning all our lives, it has always been a ground-up exercise. Now it's a top-down dictatorship, and certainly there is resentment at the municipal level" (McCormick, 2011a, p. 7). Simcoe County nevertheless began to modify its Official Plan to incorporate changes required by the Amendment and the Lake Simcoe Protection Plan. An updated version of the Official Plan was approved by County Council in early 2013. The County has sought a decision from the province on the revised Plan through the Ontario Municipal Board.

Lower tier municipalities' growth management initiatives

Concurrent with the County's growth management planning efforts, lower tier municipalities in Simcoe have embarked on a variety of initiatives to manage growth. While the majority of municipalities have embraced the notion that development should make efficient use of existing water and waste water infrastructure, few have adopted programs to implement other aspects of growth management such as encouraging a mix of land uses, intensification of built up areas in lieu of greenfield development and the encouragement of transit-supportive densities. Some of these efforts, such as Clearview Township's Growth Plan released in 2009, provide broad vision statements for the management of growth, but lack specific policy recommendations or implementation actions to achieve these goals (Clearview Township, 2009). Others, such as the Town of Collingwood, have embarked on more ambitious strategies to manage growth, including the identification of areas for intensification and policy changes to permit higher density development (Town of Collingwood, 2012). Still other municipalities, such as the Town of Wasaga Beach, have commenced a process to better understand their unique growth challenges through

planning studies on such topics as tourism housing conversion and active transportation (Meridian Planning Consultants Inc., 2008; Town of Wasaga Beach, 2013).

Many of Simcoe's lower tier municipalities have expressed a strong preference for the local management of growth rather than a County-driven approach. To address financial and logistical challenges associated with local service delivery, lower tier municipalities have engaged in various partnerships and contractual arrangements with other municipalities – particularly with the separate cities of Barrie and Orillia (Spicer, 2013). Some of these partnerships have emerged as a result of shared challenges related to Growth Plan implementation, such as the growth planning working group organized by the urban nodes of Barrie, Orillia, Collingwood, Alliston (in New Tecumseth) and Bradford (in Bradford West Gwillimbury). The working group initially excluded Simcoe County from participating and expressly objected to the County's involvement in future water and wastewater planning ("Innisfil presses urban nodes to embrace joint service agreements", 2013; "Growth communities hope to work together", 2009). The working group's focus evolved and membership eventually broadened to include the County of Simcoe and additional urban nodes identified in Amendment 1 of the Growth Plan (Alcona in Innisfil, and the towns of Midland and Penetanguishene) ("Innisfil presses urban nodes to embrace joint service agreements", 2013).

Lower tier municipalities' approaches to managing growth in Simcoe have been greatly influenced by the development industry's vision for the area. A number of development and planning proposals, including those for Big Bay Point, Midhurst, and Bond Head exemplify this developer-led approach, particularly for residential and resort developments. By virtue of their size, the proposed developments have the potential to greatly influence how and where Simcoe will grow over the long term (Birnbaum et al., 2004). As well, they demonstrate a conflict in priorities for growth between lower tier municipalities, the County and the province that has resulted in prolonged clashes over local development. In a 2017 review of development and planning in the outer ring municipalities, a Neptis study and policy gap analysis (Allan, McGillivray, & Allan, 2017; Neptis Foundation, 2017) confirmed that lower tier municipalities in Simcoe County were continuing to plan for low density development outside of built-up areas in areas called "undelineated built-up areas" (UUBAs), enabled through a policy gap in the Growth Plan:

"Simcoe has planned for almost 40 percent of its growth to be in the form of intensification. But rather than directing intensification to locations with well-established urban infrastructure, institutions, and amenities – such as Collingwood, Midland, Alliston, or Wasaga Beach – a review of the County's land budgets shows that about 65 percent of the

units that have been approved as intensification in Simcoe County are being directed to UBUAs; 83 percent of these units are in the form of single detached housing units." (Neptis Foundation, 2017, p. 4)

Big Bay Point Development, Town of Innisfil

In 1999, an application was submitted to the Town of Innisfil for a large resort and marina development in the small, seasonal community of Big Bay Point. Dubbed the largest inland marina development in North America, the proposal would see the establishment of accommodation for 7,500 resort residents and associated retail and recreation development including a golf course, in an area well outside of Innisfil's urban and village settlement boundaries (Seaborn & Beccarea, 2007; Vanderlinde, 2012). Reportedly cautious about the proposal (Birnbaum et al., 2004, p. 33), Innisfil Council nevertheless approved the applicant's request for an Official Plan Amendment (OPA 16) to change the 239 ha subject lands from an agriculture and shoreline designation to "special policy area – resort development", along with a set of specific conditions for the approval of any future development. Innisfil Council subsequently approved a secondary plan submitted by the developer for the proposed resort and marina to accommodate 2861 residential units (OPA 17).

County Council and the province initially objected to Innisfil's Official Plan Amendments. The amendments ignored the recommendation by the province's 2006 IGAP process to locate growth in a subdivision at the north end of the town. Innisfil's Director of Planning and Development openly acknowledged the Big Bay Point Plan's disregard for the IGAP recommendation, stating "We identified where we'd put [the population growth] independent of the consultant's [IGAP] work" (Sprawl hits above the belt.). The plan also contradicted the County's preferred strategy for urban development, as set out in section 3.5.1 of the County's Official Plan, "to utilize existing settlements where appropriate in accordance with the policies of this Plan, as the setting for urban uses and/or most non-resource related growth and development" (County of Simcoe, 2005). Despite the developer's intention for the resort mainly to serve seasonal residents, the County noted that the difference between seasonal and year round occupation was inconsequential: seasonal occupation would still require the transportation and water/waste water infrastructure of a more traditional urban development (County of Simcoe, 2005). In a letter from the Ministry of Municipal Affairs and Housing to the County, provincial staff reiterated the County's concern that the Official Plan Amendment and the secondary plan failed to prevent "a settlement from being developed in an area that is not planned for such a use" (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2005). In addition, the province felt that conditions imposed on development in the special policy area failed to provide certainty regarding adequate servicing and

protection of natural features and functions and that the town had failed to ensure that all required conditions had been met in its adoption of the secondary plan (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2005). Under threat of arbitration through to OMB by the developer, the County and province approved the OPA, securing assurances from the developer for the provision of adequate water and waste water servicing and the enforcement of seasonal usage of the residences (Seaborn & Beccarea, 2007). Two resident groups dissatisfied with the out-of-court-settlement proceeded to bring the case before the OMB, but failed to convince the board of their concerns.

Midhurst Secondary Plan, Springwater Township

Midhurst is a low density, estate-residential community of approximately 3000 people located to the northwest of Barrie in the Township of Springwater. The Midhurst Secondary Plan (OPA 38), was initiated by the Township as part of a process to plan for and direct growth to the small settlement areas identified by the Township in their Official Plan. The plan, which was approved by Springwater Township Council in 2008 and County Council in 2011, provided a long term blueprint for the transition of the small, bedroom community of Midhurst to a community of approximately 30,000 residents – a population size that exceeded provincial population allocations set out for the entire township by 10,000 people (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2011; Township of Springwater, 2008). The plan emphasized growth in greenfield areas outside of the concentrated built area of Midhurst at an average density of 40 people and jobs per ha.

In 2011, Simcoe County's decision to approve the Secondary Plan was appealed to the OMB by the province for its failure to conform to the policies of the Growth Plan. The province contended that the Plan exceeded Growth Plan population forecasts, directed growth to locations outside of built up areas and to areas that did not offer municipal water and wastewater systems, and failed to meet intensification and density targets (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2011). Other reasons cited for the appeal were the Plan's prematurity with respect to Simcoe County's incomplete Official Plan conformity exercise, its failure to conform to the PPS with regard to municipal coordination, management of growth and provision of infrastructure and public service facilities, and its failure to conform to the County of Simcoe's Official Plan population forecasts (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2011).

After discussions with the County, MMAH withdrew its appeal for 300 ha of the total 756 ha in the Midhurst Secondary Plan, claiming that the Plan guiding development of those lands conformed to the Simcoe Sub Area policies of the Growth Plan and the transitional requirements of Ontario Regulation 311/06 (County of Simcoe, 2013; Ontario Ministry of Municipal Affairs and Housing (MMAH), 2012).

Critics of the decision argued that approval of plans for the 300 ha could have only occurred with the weakening of the Growth Plan through provisions in Amendment 1, which allowed for the expansion of Simcoe's forecasted population by 20,000 people (Malcolmson & Donnelly, 2012). The decision to approve the Secondary Plan for the remaining 456 ha is still under appeal.

Bond Head Development, Bradford West Gwillimbury

Plans for development for Bradford West Gwillimbury, an urban and rural municipality located immediately north of Toronto and the Greenbelt, have been the focus of considerable controversy. As a result of its proximity to Toronto and major highway infrastructure, the municipality of Bradford West Gwillimbury has experienced significant residential development pressure to service commuters working in Toronto. Responding to this pressure, the town adopted an Official Plan in 2002 and a series of Official Plan amendments in which settlement boundaries for the Bradford urban area would be expanded by approximately 1,100 hectares. In addition, the town designated land around the intersection of Highway 400 and County Road 88 as a Special Policy Area for future employment use. The servicing and development of these employment lands hinged on an anticipated highway link known as the Bradford Bypass (de Avellar Schiller, 2009). This employment area was later enlarged under an Official Plan Amendment (OPA 15).

In 2003, Bradford received a significant development proposal that would see the urban settlement area of Bradford connected to the small hamlet of Bond Head in one continuous urban area that crosses Highway 400. The new Bradford Bond Head Planning area was projected to accommodate 115,000 people and 55,000 jobs.

Subsequent applications from a private developer under the name Bond Head Development Corporation included two Official Plan Amendment applications for the expansion of settlement boundaries for the 200 residence hamlet of Bond Head and the expansion of employment lands along the 400 corridor. The Amendments were approved by town council, but a failure of Simcoe County to approve amendments within the statutory time frame led the proponent to appeal the County's lack of decision at the OMB.

Critics of Amendment 15, which proposed an expansion of the employment area, argued that any board decision on the case was premature without the pending Simcoe Amendment to the Growth Plan (Ghombu, 2009). Justifications for the expansions of either the Bond Head Settlement or the Bradford strategic employment area were also questioned given that the County of Simcoe's earlier land budget exercise had demonstrated that it had enough greenfield and employment lands already approved to

accommodate Growth Plan forecasts (Doyle, 2009). As well, any expansions of urban areas would lead to the loss of prime agricultural land (de Avellar Schiller, 2009). The Ministry of Municipal Affairs and Housing and the Ministry of Infrastructure originally objected to the Amendment given the "oversupply" of lands already designated for employment in South Simcoe and planned to present their case at the hearing (Gombu, 2009a). However, changes to Amendment 15 negotiated through a provincial facilitator resulted in the province cancelling their plans to attend the OMB hearing (de Avellar Schiller, 2009). The province later released Simcoe's Amendment 1, which integrated the Bradford Strategic Employment plan and identified it as an additional area for growth.

Toronto media and environmental organizations accused the province of succumbing to development pressures in their approval of the employment lands. An earlier agreement between the province, Bradford West Gwillimbury and manufacturing company Toromont had been negotiated to permit the company to relocate to Bradford from its Vaughan location. The Vaughan-based company had stated that it would consider moving its 2500 employee operation to Manitoba if it couldn't find sufficient lands to relocate. Providing the necessary water and waste water servicing would be cost prohibitive without additional development and the residential expansion proposed for Bondhead in OPA 16 (Gombu, 2009b; Gombu, 2009c).

City of Barrie Growth Management Initiatives

In the decades prior to the Growth Plan, Barrie's rapid population growth was accommodated primarily through annexation; since 1954, the City expanded its boundaries nine times (Birnbaum et al., 2004). By 2004, the challenges associated with the City's past emphasis on peripheral residential development and a lack of investment in the City's urban core had become apparent. These challenges included a declining downtown, a shortage of greenfield lands suitable for employment uses and the need for another contentious boundary expansion.

Initial approaches by Barrie to resolve some of its growth problems led to the adoption of a number of initiatives to encourage downtown redevelopment. Following the release of the Growth Plan in 2006, and with the need for additional employment lands, Barrie adopted a more comprehensive approach for growth that hinged on both intensification of the existing built up area and the annexation of lands to the south of Barrie in the town of Innisfil. Barrie's proposal to annex lands to the South to accommodate employment growth was met with strong opposition from the town of Innisfil, who rebuffed Barrie's offer to share some of the costs of upgrading Innisfil's water and waste water servicing. Simcoe County politicians were also vocal about their opposition to Barrie's plan, and negotiations between the municipalities to resolve the problem failed. The province eventually intervened to resolve the dispute,

which resulted in the adoption of the Barrie-Innisfil Boundary Adjustment Act in 2009 to permit the expansion of Barrie's boundary by 2335 hectares into lands that were formerly part of Innisfil. The boundary expansion, Barrie argued, was compatible with the province's vision for Simcoe, which identified Barrie as the region's primary urban growth node. The expansion would permit Barrie to "continue to function as the primary location for new population and employment growth and regional services" (Government of Ontario, 2009, p.10) where compact, complete communities were more likely to be achieved and serviced by transit.

Barrie's approach for managing growth evolved further when, in 2009, the City adopted a revised Official Plan to conform to the Growth Plan and engaged a consultant to develop a comprehensive Growth Management Strategy. The Growth Management Strategy, which comprehensively reviewed existing housing, market and infrastructure conditions and opportunities for intensification and multimodal transportation, marked a significant break from Barrie's historical approach to urban planning.

Barriers to Growth Management in Simcoe

Of the three case study regions, Simcoe faced the greatest total number of barriers to growth management, with 27 barriers reported compared with Waterloo (18) and Peterborough (23). As the focus of a contentious urban growth and water infrastructure debate since the early 2000s, Simcoe has been the subject of a large number of planning and growth management studies. As a result, almost twice as many media reports and planning documents were collected for this research compared with the Waterloo and Peterborough study areas. While the abundance of documents examining growth management in the region may have inflated the number of total barriers due to the greater specificity and understanding of the challenges facing Simcoe, it also reflects a widespread acknowledgement of the significance of Simcoe's growth management challenges (Appendix C; Figure 7).

A total of 14 key barriers were identified for the Simcoe case study region, with 12 of those reported by at least 10 percent of interview and document sources (Table 14, Figure 8). The remaining two barriers were identified through a critical analysis that examined how the reported barriers related to local contextual factors, historical information and local planning discourses. The two barriers, described as insufficient planning capacity and inefficient or inconsistent administration, were identified as serving critical causal and reinforcing functions between the actions of the local implementing agency and low density urban form. These functions are described in more detail in the subsequent section.

Of the 14 key barriers, rejection by council and staff of provincial oversight, and amenity migration were two newly identified barriers that did not form part of the original model. Rejection by council and staff of provincial oversight was frequently demonstrated in interviews and media reports

through statements that indicated frustration with the intervention in local planning matters by the province and a perception that planning in Simcoe required a "made-in-Simcoe" approach. The barrier referred to as amenity migration describes the physical characteristics of the Simcoe area that have attracted amenity migrants, and the social and economic conditions stemming from amenity-related development. Amenity migration was treated in the conceptual model as a local contextual factor.

While Simcoe shared similar key barriers at the societal environment scale when compared with Waterloo and Peterborough (preferences for low density suburban forms and auto dependency), interview respondents and document sources emphasized a different set of barriers at the planning environment and artifact scales. Planning environment barriers represented the largest proportion of key barriers for Simcoe, with nine of the 14 barriers identified from the planning environment scale. In contrast to Waterloo, where characteristics of developers comprised the key planning environment barriers, Simcoe's barriers were found to consist of characteristics of the implementing agency and weak or absent interorganization relations. These barriers were found to provide the political and administrative basis for barriers at the artifact scale, such as non-conformity of local Official Plans to the Growth Plan, and incompatible provincial policies decision making. Pressures stemming from amenity migration created additional constraints on the planning environment to manage growth in Simcoe.

Table 14. Simcoe Case Study Area: Key Barriers to Growth Plan Implementation.

BA	ARRIER TYPE	BARRIER		
A	Local Plans and Policies	Official Plan does not conform to Growth Plan		
A	Federal and Provincial Plans and Policies	Incompatible provincial decision making, policy and investment		
P	Characteristics of implementing agency	Lack of political will		
P	Characteristics of implementing agency	Lack of staff commitment to growth management objectives		
P	Characteristics of implementing agency	Staff view high density development as incompatible to local character		
P	Characteristics of implementing agency	Insufficient planning capacity		
P	Characteristics of implementing agency	Inefficient or inconsistent administration		
P	Characteristics of implementing agency	Staff view their role as dependent on the market		
P	Inter-organization Relations	Poor coordination and level of engagement between local and upper tier government agencies		
P	Inter-organization Relations	Weak or absent regional coordination of local planning		
P	Inter-organization Relations	Inter-municipal competition for development		
P	Inter-organization Relations	Rejection of provincial oversight		
S	Consumer Preferences	Consumer preference for low density suburban form		
S	Consumer Preferences	Auto dependency and absence of alternative travel options		
	Local Context	Amenity migration and associated physical, social and economic characteristics		

A: Artifact; P: Planning Environment; S: Societal Environment

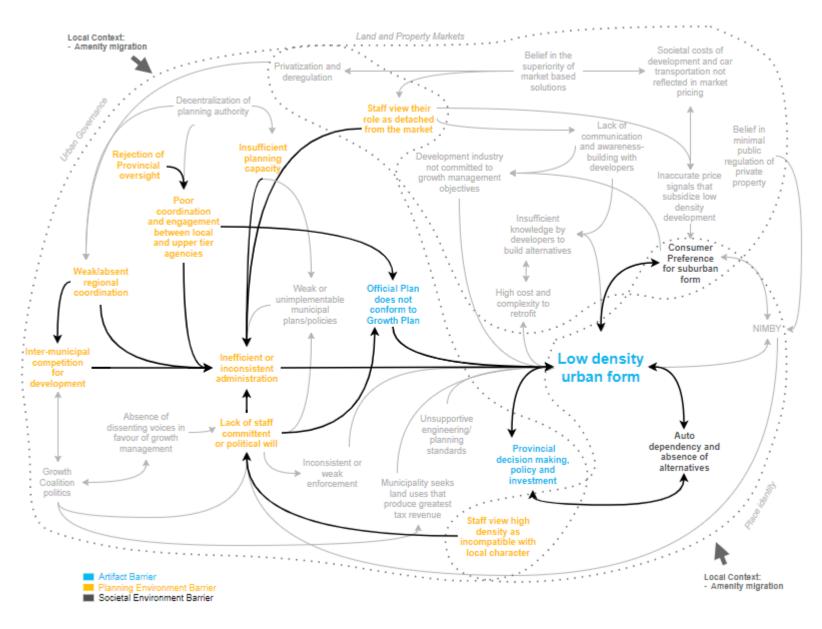


Figure 8. Simcoe Case Study Area: Model of Key Barriers to Growth Plan Implementation. Bold text indicates key barriers identified in interviews and planning/media documents. Arrows denote positive or reinforcing relationship.

Model of Barriers to Growth Management for Simcoe

Inter-organization Relations: Horizontal Inconsistency

Analysis of planning documents and media reports revealed horizontal inconsistency as a key challenge facing growth management in Simcoe area. The challenge was reported to stem from administrative fragmentation inherent in Simcoe's county-city municipal system of governance. Originally designed to provide only a basic level of service to rural communities, county governments have limited statutory responsibilities compared with regional governments (Siegel, 2009). With no authority over land use policy and planning decisions for the Cities of Barrie and Orillia, and policy planning powers to guide lower tier municipalities granted by the province as late as the 1990s, Simcoe County's authority to establish a county-wide vision for growth has been limited. The absence of formal institutional linkages between the separated Cities of Barrie and Orillia and the County have permitted land use decisions for urban areas to be made without consideration for rapidly suburbanizing peripheral municipalities and vice versa. Informal service sharing agreements to manage issues that span multiple boundaries have historically focused on the provision of emergency services and not the coordination of development or development related infrastructure (Spicer, 2013). The uncoordinated development approvals process combined with inter-municipal competition for assessment dollars have been described in some reports as helping to create ad hoc, sprawling development, inefficient water and waste water servicing and increasing challenges for the Simcoe and Nottawasaga watersheds to assimilate urban runoff and waste water effluent (Birnbaum, Nicolet and Taylor, 2004).

Compared with areas governed by regional governments, Simcoe's county-city governing system was found to be more susceptible to city boundary expansions to accommodate growth. County townships that focus suburban growth adjacent to Barrie and Orillia, for example, benefit from an increase in their assessment revenue but are not responsible for the externalities of such growth, such as the maintenance of adjacent city roads and other infrastructure (Spicer, 2013). As a result, Barrie through its numerous annexations, has demonstrated a vested interest in controlling the types of development that occur near their urban boundaries and has proactively sought boundary expansions to secure planning rights to the area and preserve future land supply. The county-city governance system leaves the area vulnerable to future boundary disputes and puts additional strain on local relationships and competition for development. With as many as eight of the 16 lower tier municipalities in Simcoe County with sufficient population size (15,000 people) to apply for city status, there is a potential that land use decision making in the Simcoe area will become even more fractured.

Simcoe's fragmented governance system and conflicting views on how best to manage city and rural growth has challenged Simcoe's efforts to coordinate planning activities and allocate resources to Growth Plan-supportive policies and programs. Divergent views have created tensions between municipalities – particular between Barrie, Innisfil, and the County. Tensions between Barrie and Innisfil escalated during the boundary dispute that led to the abandonment of talks between the two municipalities despite assistance from a provincial development facilitator. Frustrated with Barrie's lack of support for the County's plans for the disputed lands, County Warden Tony Guergis was quoted as saying "Why can't Barrie respect the fact that 17 municipalities worked together on an area-wide plan that respect [sic] each (community's growth?) Why can't Barrie work with its neighbours?" ("Warden blasts MPP over border dispute", 2009). The dispute reached a climax when Innisfil launched a "Fair Growth" campaign to encourage the province not to intervene in the dispute and both Innisfil Mayor Brian Jackson and County Warden Tony Guergis joined the campaign's protest outside of the Provincial Legislature ("Innisfil Takes Protest to Queen's Park", 2009).

Relations between cities and the County were further strained as a result of the growth planning working group initiated by Barrie, Orillia and the County's growth nodes but which excluded the County from participating ("Innisfil presses urban nodes to embrace joint service agreements", 2013; "Growth communities hope to work together", 2009). The meeting angered a number of municipal mayors who felt the meeting without County involvement was "divisive" and even "reprehensible" ("Growth communities hope to work together", 2009; "County to Barrie: let's start fresh", 2009).

A governance review by independent consultants contracted by Simcoe County confirmed the need for better coordination of land use and infrastructure by the County. In a 61 page report, the consultants concluded:

"The documents reviewed for this governance study suggest a need for better planning and coordination of area-wide services and infrastructure. Simcoe County has not played an active leadership role in facilitating these discussions" (Berkeley Consultants, 2010).

Further, the report found that:

"Based on our research, information collection and analysis, Simcoe County is a relatively weak form of County upper tier governance. Moreover, we have concluded that Simcoe needs to strengthen its governance in terms of: Developing a clear vision and strategic priorities; Taking County positions on key area-wide issues; Providing consistent and focused County leadership. We do not feel that the current governance structure and form are sufficient to do this. Change is needed" (Berkeley Consultants, 2010).

Simcoe's lack of horizontal consistency in the management of growth was found to be reinforced by the preference of County and area municipal officials for a decentralized governance approach. The governance review report's conclusions and recommendations, for example, were not universally accepted by County Council (Berkeley Consulting Inc. 2010; Simcoe County Governance Committee, 2012), and elected officials of lower tier municipalities reported a preference for a "weak" County structure to ensure retention of local decision making power. To date, the County's Governance Committee have pursued only a subset of the report's recommendations, mostly pertaining to the structure and form of County Council (County of Simcoe Governance Committee, 2012).

Despite the large number of planning documents and media reports pointing to horizontal consistency as a challenge to effective growth management, few Simcoe area planners reported horizontal inconsistency as a barrier. Only two respondents identified the need for a shared vision for growth, and improved coordination of servicing and development approvals processes as necessary precursors to meet Growth Plan objectives. One of these respondents noted that differing local visions for growth coupled with the competition for the tax assessment dollars from new development presented a significant challenge to municipal collaboration to manage of growth:

"I think there is also the parochial interest of surrounding local municipalities, who all want additional lands to sort of grow in their decentralized and sometimes partially serviced areas. And there is a lot of resistance. For example, not withstanding the now updated Official Plan that doesn't deal with the annexed land, we've had three appeals from developers and a municipality outside of our area, and the appeals have nothing to do with the numbers or targets in our official plan, but they have everything to do with their resistance to the Simcoe Area Strategic Vision for Growth. So, that is the development community and the neighboring municipalities that have ambitions to grow within their urban areas and the province not having allocated the population numbers to them, but regionally located them in Barrie and, you know, other nodes." (Planner, Single tier municipality).

Another planner noted that without County level approval authority for all subdivision approvals, some form of partnership would need to occur between the County and its lower tier municipalities to ensure that the County could track development approvals and assess conformity to land budgets and County Official Plan policies. This planner also noted disjointed planning for servicing presented a significant challenge for the County:

"...Each of our sixteen local municipalities has full jurisdiction for sewer & water, and as many sort of systems that are — don't use the word piecemeal — but, they've been sort of planned in silos of the years on their own to service their own communities, and I think there needs to be a broader look at the servicing aspect to link some of these smaller communities" (Planner, Upper tier municipality).

Many interview respondents indicated a general lack of support for the province's efforts to establish a region-wide plan for growth. The province's regional growth management framework and assignment of population forecasts for each lower tier municipality (Amendment 1) were described by some respondents as helping to intensify inter-municipal competition and interfere with collaboration:

"The legislation is not reality. It is trying to both dictate growth and employment by academic exercises of allocating numbers, which is crap. It really is fundamentally flawed. I'm sorry, it may work in theory, but in practice it doesn't work. You are now pitting one region versus another, and the damage that has been done in this area of people fighting... "how come you have decided, the province of Ontario, that Bradford, Innisfil and Essa are going to be the winners and we are not"? That is fundamentally wrong. Now you've pitted township versus township in a County against each other, you're pitting County versus regions and other municipalities against each other, and that is fundamentally wrong" (Economic Development officer, Upper tier municipality).

Similar sentiments were echoed by a number of elected officials. Tiny Township Mayor, Peggy Breckenridge, for example, blamed the Growth Plan population forecasts as the catalyst for the tensions between Barrie and the County, stating: "It's the province that pitted us against each other. It's the province that pitted us against the City of Barrie" (Watt, 2009). Breckenridge's view, however, failed to account for the fact that Barrie had already investigated expansion of its settlement boundaries through amalgamation with Innisfil prior to the release of the Growth Plan in 2006 (Birnbaum et al., 2004; Spicer, 2013).

Inter-organization Relations: Vertical Inconsistency

Interview results and media/document analysis revealed that vertical inconsistency was another key theme that obstructed municipal efforts to manage growth in the Simcoe area. The lack of conformity of Simcoe County's Official Plan to the Growth Plan served to delay both County scale growth management planning and Growth Plan conformity of many local municipal Official Plans by almost a decade. Moreover, some local municipalities disregarded both County and provincial planning

approaches and sought their own approaches to growth management, as demonstrated through contentious development projects such as Innisfil's Big Bay Point.

Underlying the absence of vertical consistency with the Growth Plan was the widespread belief that the Plan and proposed Amendment for Simcoe failed to account for Simcoe's unique planning context and a preference for local planning solutions. County planners and those from smaller towns and townships felt that the planning context in Simcoe differed significantly from other, more urban regions in the Greater Golden Horseshoe. As one County planner stated:

"... I don't think it [the Growth Plan] should be applicable to Simcoe County, and some of the outer ring municipalities. I honestly think what they've tried to do is paint this area with the same paintbrush as Greater Toronto, and we simply are a different beast. And we don't have the urban fabric here, and the concentrations, public transit, the connectivity, we don't have sewer and water infrastructure in many places – it's just not there and therefore, it is difficult to impose the same requirements on an area as vast and diverse as Simcoe County as it is to area like Hamilton, Oakville you know, York Region, whatever, it's just not the same beast" (Planner, Upper tier municipality).

County and local municipal planners cited many reasons why they felt the Growth Plan was not an appropriate planning tool for Simcoe County. These ranged from the impact of intensification and density targets on the character of rural communities, the lack of intensification opportunities in small communities and the appropriateness of density targets for resort communities. The feasibility of density targets was regularly questioned by interview respondents and planning documents. Clearview Township alluded to their objection to provincial Growth Plan targets directly in the Township's Growth Plan, which stated: "A single minded focus on numbers inhibits the ability to plan for a vision of complete communities in which all residents benefit from advancements in standards, servicing and economic opportunities" (Clearview Township, 2009, p. 6). Interview respondents identified a wide range of objections to the Growth Plan's intensification and density targets, including the targets' incompatibility with Simcoe's strong market preference for single detached homes and large lots, the willingness of workers to commute, and climate:

"We recently put in a request to get a lower intensification target that is part of the Growth Plan. One of the arguments we used was simply the actual snow accumulation we get in this area, which is different from other geographies covered in the Growth Plan. So, simply snow storage can be a challenge in many of our areas on many winters if you have a thirty or forty-foot lot and half of it is a driveway, literally piling snow can be a challenge if you start

talking about some of these more denser housing forms in terms of trucking snow, and townhouses and quads and some of these other apartment style things – is even finding snow storage can be a challenge in the cost of trucking that to make for safe ingress and egress over snow banks is a real problem here" (Planner, Upper tier municipality).

Vertical inconsistency was exacerbated by a low level of coordination and engagement between Simcoe municipalities and the province, a problem widely cited by interview respondents and referenced in correspondence. The already strained relationship between Simcoe County and the province, in particular, intensified after the Ministry of Municipal Affairs and Housing failed to approve the County's Official Plan and instead released its own vision for Simcoe with apparently limited engagement with the local decision makers. County Councilors, who had embraced the province's earlier efforts to coordinate and fund the Intergovernmental Action Plan, were both surprised and angered by the province's actions and responded to the province's Strategic Vision for Simcoe by passing a resolution "that the province of Ontario be asked not to make a bad political decision by imposing a solution that conflicts with the consensus obtained in the Area Wide Growth Plan for the entire County of Simcoe..." (Guergis, 2009). County Warden, Cal Patterson, later penned a letter to the Ministry of Infrastructure decrying their failure to make a decision on the Official Plan and the disrespect the County was feeling as a result of lack of communication from the province (2011). In his letter Patterson reiterated his continued belief in the superiority of a local solution (2011).

Other participants expressed dissatisfaction with the way the province had worked with their municipality in the process of developing the Growth Plan Amendment. A number of municipal planners echoed concerns by local politicians (e.g. Bell, 2012) that direct communication from the province to front line staff was lacking and that requests to the province for input went unanswered:

"[Places to Grow] is being implemented in a very bureaucratic fashion. The province said they would come out a meet with us individual municipalities to talk about Smart Growth and everything. We all submitted position papers to them. They've ignored the papers, won't respond, and have refused to come out to meet with us. They had meetings with CAOs at the County level, but no planners were involved. So it is really a very bureaucratic, top-down, ivory tower approach" (Planner, Lower tier municipality).

Characteristics of the Implementing Agency

Certain characteristics and worldviews entrenched in Simcoe's planning agencies and elected officials were found to reinforce the preference for local over regional planning and challenge vertical and horizontal coordination in decision making. Many elected officials demonstrated, through written correspondence and public statements, a belief in the superiority of local solutions and a rejection of provincial intervention. Resentment of provincial involvement in local planning matters was also expressed by many municipal staff interviewed for this research, many of whom were frustrated about the shift in decision making power and perception that local views and issues had not been properly accounted for in the province's planning processes:

"What they [the province] basically are saying is that they don't care what people want and that big brother in Toronto knows best... Local municipalities and Official Plans need to have a very clear definition of where they want their growth to take place, ensure that the growth happens where it doesn't put impacts on the environment, make sure we have strong Official Plans to protect our farmlands for a long time, but to say that only the province of Ontario has the foresight and ability to do that; again, I don't think that is right (Planner, Upper tier municipality).

"We're doing, I would like to say, fairly sophisticated planning, and I would like to get that provincial person who said we are doing poor planning...I would like to get them down here and show them some of the things we are doing. But they are not listening" (Planner, Lower tier municipality).

In contrast to Waterloo, Simcoe planners cited a relatively low level of commitment by politicians to the principles of the Growth Plan and growth management in general. Strong consumer preferences for low density development coupled with community resistance to compact urban forms – particularly multi-story developments – were cited by many Simcoe interview respondents as significant sources of political pressure. In some cases, municipal staff commitment was also acknowledged as an obstacle to implementing the Growth Plan:

"I think in our case...there are two obstacles. One is a little bit of a switch in the thinking from a rural type council and staff to somewhat more of an urban type of thinking, in terms of development standards, densities etc. Because we do have urban areas. We are an amalgamated municipality, we have a huge rural area, but we also have rural areas that experience significant growth pressures. And we really need to switch the mindset a little bit

towards urban design, intensification, how to deal with those urban pressures as opposed to thinking of the old days of rural subdivisions and so on. When I got here about 10 years ago the biggest subdivision would be 50 lots. Right now we're processing subdivisions that are 1100 lots or more, so it takes a very different mindset to deal with those. And we really need to look more at urban design standards when dealing with subdivisions of that scale and impact" (Planner, Lower tier municipality).

"The first [barrier to growth management] is acceptance by the respective municipalities from a political and staff point of view, and then acceptance from the social point of view of those people within those municipalities. Everybody may be fascinated by what is happening on the waterfront in Toronto, but they don't want to see it in their communities as they come further north. And when you look at the characters, the spatial characters in all of our communities north of Toronto, there are very few high rises, save in except in specific areas; there are very few intensification programs, except in specific areas; or brownfields that have been redeveloped into townhouses or something of that nature, so it is really an uphill battle" (Planner, Upper tier municipality).

Growth Plan targets, in particular, were perceived by many planners to be inappropriate for the region's dispersed configuration and local market preferences. Planners frequently cited auto dependency as a deeply rooted characteristic of Simcoe residents that would not be readily changed through more compact development. Simcoe County planners were unoptimistic in their view that Growth Plan targets would lead to a transformation of their region from one of low density, automobile-oriented development to one that was more compact and transit supportive:

"We feel that their targets in the Places to Grow are excessive for Simcoe County. We put a report in front of them as late as two months ago, suggesting that the target intensification of 40% be reduced to 25% and the persons per hectare be reduced from 50 down to 32. Which is something more reflective of the 'made in Simcoe County' philosophy" (Planner, Upper tier municipality).

"The problem I see with the Growth Plan is that this document applies very broadly to a huge geography in southern Ontario, and to read a document that applies equally to downtown Mississauga, and downtown Hamilton, and Markham and Richmond Hill, and then the same policy applies to smaller communities in our area, like we have 91 settlement areas and to try and suggest that these are going to be less automobile reliant and more

compact housing forms could ever be realized in the vast majority of them, I think is a shortcoming of the policy" (Planner, Upper tier municipality).

Lack of support for the Growth Plan was driven in part by a competing priority to maintain the region's current low density, rural character. Maintaining the small town character of Simcoe's smaller, rural and suburban communities was a policy priority frequently noted in policy documents and by interview participants. Simcoe County planners and planners from predominantly rural municipalities perceived the Growth Plan's density and intensification targets as conflicting with their communities' goal to preserve their small town character.

"It's going to be challenging to keep our character of the town – you know, we're a small town. So to keep the character and still achieve the intensification targets can be very, very difficult for us, I think...And [maintaining the small town character] is something that council feels strongly about, something the residents feel strongly about. They've come here – we have three separate urban areas Alliston, Tottenham, and Beaton. Alliston being the biggest one, and the one that's sort of accommodating all the growth right now, so especially Beaton and Tottenham, the residents there really want to see as a little change as possible, you know. So that will be difficult for us" (Planner, Lower tier municipality).

"The reality is that - you can ask anybody on the street - in Barrie they don't feel a sense of community. They have no connection to their community, it is growing so fast that there is no identity of being somebody from Barrie. Somebody from Orillia or Midland or Penetanguishene or Wasaga Beach has an identity of being from that place. The legislation, the way it is, and if allowing the type of growth in the other areas outside Barrie, you're starting to destroy the fabric of what those communities are" (Planner, Upper tier municipality).

Planners in the Simcoe area frequently described the Growth Plan and its intensification and density targets as "planning by numbers". One respondent described the Growth Plan as inferior to the broader planning ideal of Smart Growth because of its emphasis on density over community design and livability.

"Smart Growth was about a lot more than numbers; it was about community design, preservation of agricultural lands, environmental issues and all of those things, creating livable and healthy communities etc. The Growth Plan was offered by people that perhaps were more interested in efficient infrastructure, dollars and cents, and how many people per

dollar we're spending on our infrastructure, as opposed to looking at the bigger picture. Yes, the dollar is important. Yes, efficient use of infrastructure is important. But quality of life is very important as well, and I'm not sure that if you design your community into entirely around how efficiently you can be per person or per development unit relative to your servicing cost, that that equates to a [higher] quality of life.... And it is a real focus in the Growth Plan on packing people into those mega centers to get the biggest bang for your buck, in terms of the servicing infrastructure. But, how does that translate back to quality of life?" (Planner, Lower tier municipality).

Still other planners expressed concern that reliance on provincial policy rather than a municipality's Official Plan to guide local development would lead to opportunities for appeal and non-conformance:

"What is happening, though, is that the implementation at the local level, and the tailoring at the local level, is still being interpreted in a variety of ways. I think the province has to stand behind the Official Plans that have received the provincial blessing as the document of primacy, as opposed to the municipality tailoring the policies to their context and then having developers, proponents for change, cherry pick from the provincial policy as the document of primacy, and showing that they conform to that" (Planner, Single tier municipality).

While many information sources pointed to lack of political will and staff support in the Simcoe area as a barrier to growth management, this obstacle was not distributed equally across all municipalities of the study region. Single tier municipalities in the region, for example, tended to be more supportive of the Growth Plan targets and principles compared with County and many lower tier municipal staff. The City of Barrie, for example, was found to be more supportive of Growth Plan objectives, and this was demonstrated through strategies to revitalize the downtown and waterfront, intensify residential areas, and encourage mixed use and transit supportive development in greenfields. As early as 2004, in response to growing concern about land shortages, Barrie Council adopted the strategic priority to manage the type and rate of growth. In 2008 when the County released its draft Official Plan, Barrie politician, Mike Ramsay, openly criticized the "community of communities" model promoted by the Plan which distributed growth more equally across the lower tier municipalities at densities significantly lower than the provincial target:

"A community of communities is an environmental nightmare, where you will scatter subdivisions on farmland, where you will see villages grow into small towns that won't be

able to have public transit; will be large enough to create sprawl, but not large enough to support the necessary recreational facilities and create a tax base that can foster the development of any community" (Barrie and its neighbours at odds over future growth.).

In a 2008 report to Council, Barrie planning staff argued for the need to shift from low density, ground oriented housing to more sustainable urban forms to reduce land consumption, servicing costs, and auto dependency (City of Barrie, 2008). One planner interviewed for this research described the City of Barrie's growth management planning as evolving away from low density development:

"We have for quite some time, because we've run out of land to develop, needed to look at ways of intensifying anyway, so I think the mindset was already being recognized within the municipal boundaries, as to the need to intensify and focus on the urban growth areas and that type of thing. I think one of the most successful tools that we've – or not tools, but documents – that we've relied on is the provincial leadership that they have given us' (Planner, Single tier municipality).

Planning capacity was found to vary significantly across the case study area, with smaller municipalities employing fewer than 5 full time development planning staff, few to no full time policy planners and limited planning support from the County. Municipality planning capacity and resources in Simcoe County has been described by others as not commensurate with the pace and complexity of development in the region. Staff have reportedly been challenged to meet the 90-day response time required for development proposals, leading to appeals to the OMB for lack of decision (Birnbaum et al., 2004). Further, the absence of sufficient planning capacity and resources has created a reactive, developer-led planning process regarding where and how development should occur.

"Simcoe County has no authority over water and wastewater services. In interviews, lower-tier municipal officials in Simcoe County said that they do not have the resources to undertake extensive servicing, environmental and planning studies by their own staff.

Typically, in response to a large-scale development application, municipalities enter into agreements with developers such that the developer pays for outside consultants (of the municipality's choosing) to review studies submitted by the developer's consultants. Because it is a reactive process, this reliance on outside consultants further undermines the capacity of local authorities to generate their own creative solutions in concert with politicians" (Birnbaum et al., 2004, p. 55).

Federal and Provincial Plans and Policies

Unique to the Simcoe case study region was the reported challenge associated with the Simcoespecific policies of the Growth Plan through Amendment 1. Media, interest groups, and planners and politicians outside of Simcoe County criticized the Amendment for making special provisions for Simcoe County that undermined the effectiveness of the Growth Plan. Social and environmental interest groups, such as Campaign Lake Simcoe, Environmental Defence, Save the Oak Ridges Moraine, and the Council for Canadians condemned the Amendment for increasing Simcoe's population projection by 20,000 people and allocating additional population to unserviced, commuting communities and prime agricultural lands. These groups, along with provincial planner Victor Doyle and former City of Toronto Mayor John Sewell, questioned the need for developing new employment zones along Highway 400, on agricultural lands outside of existing settlement areas, when employment lands to the South could meet the demand for projected growth (Campaign Lake Simcoe, 2010; Malcolmson & Donnelly, 2012; Sewell, 2013). In a letter to the Ontario Growth Secretariat, Doyle denounced the proposed employment areas, stating "The cumulative effect will be to open up a new linear pattern of urban sprawl along Highway 400 running virtually from the Holland Marsh to north of Barrie". York Regional Council and staff have echoed these concerns, recommending the province expand the Greenbelt northwards into south Simcoe County to curtail ongoing 'leap-frog' development into the South end of Simcoe that has occurred at the expense of agricultural and environmental lands (Regional Municipality of York, 2015).

Others have raised concern that the Growth Plan Amendment has focused growth and intensification in areas without consideration for the carrying capacity of the watershed and infrastructure needs (Doyle, 2009; Environmental Commissioner of Ontario, 2011a). Critics of the Amendment argue that Simcoe's employment and settlement areas are incompatible with existing water and wastewater infrastructure, Simcoe County's lack of infrastructure planning capacity and the assimilative capacity of Lake Simcoe and other watersheds (Doyle, 2009). In his 2014 annual report, former Environmental Commissioner of Ontario, Gord Miller, noted that underlying the Growth Plan and Amendment was a failure to acknowledge and plan for the natural limits to growth, and that planning for these limits was "...a basic tenet of sound land use planning" (Environmental Commissioner, Managing New Challenges: Annual Report 2013/2014, p. 153).

As with Peterborough County and other municipalities in the outer ring of the Greater Golden Horseshoe, Simcoe County was granted alternative density and intensification targets – a move that was argued against by some inner ring municipalities for creating an uneven playing field for implementation and reducing horizontal consistency of the Growth Plan (Regional Municipality of York, 2015). A report by the Neptis Foundation proposed that the adoption of reduced density targets set a precedent for other

municipalities seeking relief from Growth Plan targets and ultimately undermined the objective of the Growth Plan to plan for more compact, transit supportive development (Allen & Campsie, 2013). The study's findings suggested that by 2031, the overall density of urban development in the Greater Golden Horseshoe will vary little from the status quo. Following the release of the Neptis report, Environmental Commissioner Miller released a cautionary media release stating:

"The Environmental Commissioner is troubled, however, about how the Growth Plan is being implemented. Despite the goal of intensification, the Ontario government has authorized lower density targets for 9 of the 15 municipalities in the outer-ring of the Greater Golden Horseshoe beyond the Greenbelt" (Environmental Commissioner of Ontario, 2015).

The approved alternative greenfield density targets not only reduce the ability of the Growth plan to protect agricultural and environmental lands from urban expansion, the densities are also criticized for being below the level that the Ministry of Transportation claims is needed to support basic transit service (Doyle, 2009; Environmental Commissioner of Ontario, 2011). According to Doyle, "Fifty people plus jobs per hectare is barely enough to get you 20 to 30 minute bus service. Anything below that and you're talking about developments that can't be served by transit" (Tomalty, 2014).

Table 15. Alternative Greenfield Density and Intensification Targets (Environmental Commissioner, 2013/2014).

MUNICIPALITY	ALTERNATIVE DESIGNATED GREENFIELD TARGET (min # residents and jobs per ha)	ALTERNATIVE INTENSIFICATION TARGET (min % of total residential development that must be in built up areas)	
City of Kawartha Lakes	40	30%	
City of Orillia	42	-	
Brant County	35-40 by 2022*	15%	
Dufferin County	44	-	
Haldimand County	29	32%	
Northumberland County	30	-	
Peterborough County	35-40 by 2015**	-	
Simcoe County	39	32%	
Wellington County	40	20%	
Original Target in Growth Plan	50	40%	

^{*}Interim target of 35 from 2012 and 40 by 2022

With only a few exceptions, planners interviewed for this research did not report the alternative density and intensification targets or the establishment of additional employment areas as a barrier to local growth management. Most Simcoe County and lower tier municipal planners expressed support for the alternative intensification and density targets, citing the need to recognize consumer preferences and a desire to conserve the rural character of Simcoe's many smaller communities.

Consumer Preferences

Planners in Simcoe shared with their Waterloo counterparts the belief that market forces posed a significant challenge to their ability to adopt and implement local growth management policies. Like Waterloo respondents, Simcoe respondents emphasized both supply and demand side challenges to the production of compact urban forms and complete communities, including NIMBY and lack of innovation in the development industry. However, Simcoe respondents placed additional emphasis on the importance of consumer demand as a significant driver for prevailing urban forms. Planners described the strong consumer preference for low density urban forms as a feature of the region that set it apart from other areas within the Greater Golden Horseshoe:

^{**}Interim target of 35 increasing to 40 at next 5-year review or 2015, whichever is sooner

"Look around - the reality of the market forces is that [high density] types of developments are not being asked for. Look, developers by their very nature are going to squeeze the most out of what they can. So if they think they can get away within an area of having a forty-foot wide lot and having an increased density, because they make more money per hectare, they are going do it. But the reality is that is not the type of developments they are developing, and they are realizing that their market research also shows that is not what people are going to come and buy – that is not why people want to move to Simcoe County" (Planner, Upper tier municipality).

"For our town, like I said, the preference for the single-detached dwellings, it's really hampering any sort of development opportunity for the medium and higher-density developments. Just because it's high risk for developers...there's not too many examples around here of that type of development" (Planner, Lower tier municipality).

Many planners perceived the strong consumer preference for low density forms as a function of Simcoe's unique abundance of amenity migrants and relatively low land prices. Amenity migrants were hypothesized by planners to be drawn to Simcoe's rural and waterfront communities that featured an abundance of recreational opportunities and aesthetic natural landscapes, to compensate for the more congested housing environment to the south. These views reflect those of scholars who have studied amenity migration in Simcoe and elsewhere (e.g. Dahms, 1996; Dahms & McComb, 1999; Módenes & López-Colás, 2007). Simcoe planners demonstrated a heightened awareness of the "rural idyll" as a key motivation for both recreation homeownership and the purchase of lifestyle communities and the rejection of more "urban" style developments such as highrises and mixed use developments.

"I think the condensing of communities in our area is rather difficult...because of the perception that there is also so much available open land. People coming in out of Toronto who may have been living in a semi-detached town house type of venue, want to own their piece of Canadiana, so they want a small lot with a free standing house on it" (Planner, Upper tier municipality).

"Well I guess there's a subdivision up here, which is questionable whether it should be out there because it's not connected to anything...and there was certainly some desire to increase some of the densities in this area that was put forward, but the residents, the developer, they all wanted very large lots, particular backing onto the golf course. There was no interest in upping the density in that case, at all. So, did it go anywhere? No, it didn't. All the residents, there were already some residents in the area, they were pretty

adamant that the next phase of the housing to be built was going to be the same as theirs" (Planner, Single tier municipality).

Simcoe planners also noted a prevailing culture of auto dependency and acceptance of commuting that reinforced a continued demand for low density development. Further reinforcing local auto dependency was the fact that many of Simcoe County's smaller communities lacked employment options. In contrast to Waterloo planners, Simcoe planners were generally less optimistic about the likelihood that consumer preferences would change:

Yes, we need to increase our transportation opportunities and corridors, as well as our passive and active recreation opportunities, but there is going to be a disconnect between getting people out of the automobile for a working environment, because that is not why people are moving to communities in Simcoe County. They are still going to be working somewhere else; whether it is Barrie or Newmarket or Orillia, they could be living in Midland or Midhurst of wherever. That is a reality" (Planner, Upper tier municipality).

Planners noted that even those high density developments that had received all of the necessary municipal approvals were not always constructed because of inadequate demand:

"And I think that's what we'll have to wait and see in the next 5 to 10 years, if any of these developments in these more rural areas are actually built. One thing to propose and approve it—will it ever get built on the ground? And I do think we will see some of it built, but I'm not sure in some plans you'll ever see all of it built. I think developers are going to put something on paper that they have to put on, to get an approval, and then might come back later to try and modify it. Because they've fought for ten years and nothing happened. We have two high-density blocks in Barrie, my client does, that he has had sitting there now for about 12 years, that nobody is interested in. And it's right adjacent now to the major transit node—so it is an area that is going to intensify, and in 12 years not one person, not one person, has wanted to buy for high density and the city won't let them change it, so how long will people sit before they try and get it changed, I don't know, but..." (Consulting Planner, Simcoe area).

Local Context: Amenity Migration

Media and planning reports recognized Simcoe's significant growth management challenges as resulting from its resource rich natural environment and amenity migration. Simcoe's proximity to large population centres in Southern Ontario intensified these pressures and compounded the challenges associated with managing recreational development, such as seasonal residences, resorts and recreational areas.

Comprising a significant proportion of Simcoe's total development, recreational developments receive a special exemption from growth management objectives in the province's Growth Plan policy framework: Section 2.2.2.1 (i) of the Growth Plan directs "...development to settlement areas, except where necessary for development related to the management or use of resources, resource based recreational activities, and rural land uses that cannot be located in settlement areas". Simcoe planning documents, particularly those related to the controversial Big Bay Point Resort, highlighted the difficulties in defining and constraining recreational and seasonal developments given that the time frame for occupation was difficult to monitor and control. Despite the different policy guidelines for urban development compared with resource-based recreational development in the Growth Plan, Simcoe County staff recognized that the differences from a land use planning perspective were insignificant. For Big Bay Point, for example, the development of 1600 seasonal residences could create significant planning challenges if sufficient policies were not in place to address the implications of resort developments on regional land use, transportation and growth patterns. Moreover, the conversion of seasonal developments to year round occupation in the future had presented planning and infrastructure challenges for small communities such as Wasaga Beach. These challenges were noted by County staff in a report to Council regarding the Official Plan Amendments for Big Bay Point:

"On one hand, the amendments to the County and Innisfil plans have been predicated by the proponent on the basis that the development is a resort, will not have permanent residents, and can be accommodated in the Innisfil Official Plan as a recreational district. On the other hand, the proposed development is a compact and dense urban form that would have a mix of land uses (residential, commercial, institutional, recreation) that are not unlike a typical settlement designation in the County Official Plan; staff has previously indicated that the proposed development should be evaluated as a settlement. It has been staff's general approach, in terms of the provision of most municipal services, that the impacts are similar regardless of the label" (Bender, 2005).

With regard to the Big Bay Point development, provincial staff noted:

"Ministry staff are of the opinion that a development of this type and size (2861 residential units) that requires servicing through trunk watermain and trunk sewer lines from Alcona should be characterized as an urban development proposal...The proposed non-permanent ownership status is irrelevant, given that ownership of individual units is structured to permit units to be occupied almost year-round. The servicing needs and environmental impact of the development remain the same, regardless of ownership status" (MMAH, 2005).

Summary

Growth management in Simcoe was found to be shaped by rapid growth in the form of low density suburban and exurban development in the southern portion of the region and around amenity areas, and constrained by the persistence of policy direction and consumer preferences that favoured maintenance of a rural and/or small town character. Outside of the separate cities, the case study presented a relatively uniform planning environment in which planners, politicians and the public shared negative perceptions regarding intensification and compact growth. High consumer demand for low density urban forms, combined with poor regional coordination between municipalities, limited planning capacity and competition for growth contributed to a reactive, development-led planning approaches. These challenges were further exacerbated by a provincial policy framework that failed to hold the region to the Growth Plan's intended intensification and density standards.

Peterborough

With an estimated combined population of 133,568 (2011), Peterborough County and the separate City of Peterborough comprise one of more sparsely populated regions within the Greater Golden Horseshoe (Table 16). Located 125km east of Toronto, the City of Peterborough serves as the primary economic centre for the County and broader region, acting as a hub for retail, secondary education, government services and manufacturing activities. Both manufacturing and food processing were historically important industries for the City of Peterborough, as a result of readily available hydroelectricity and rail transportation (Bain & Marsh, 2012). Although these industries continue to be significant employers, the decline in competitiveness of Ontario's manufacturing markets has required Peterborough to diversify into other economic sectors including education, health and government. A small but emerging research and development sector is the result of public/private efforts to capitalize on the presence of two local education institutions, Trent University and Fleming College. Economic activities in the surrounding County are dominated by tourism and agribusiness, with seasonal residents comprising 35% of all households in the County, and rural and farm residential forming the balance (County of Peterborough, 2013a).

The concentration of population in a single urban centre is a feature that sets this region apart from the more multi-nodal urban regions of Simcoe or Waterloo. A full 60% of the region's residents are located in the City of Peterborough, with the remaining 40% situated in the eight, predominantly rural townships throughout the County. Like Simcoe, the Peterborough area is governed by a county-city system in which municipal services are administered separately by Peterborough County and the City of Peterborough. Delivery of some services is coordinated through joint service agreements between the County and City, covering matters including health and social services, waste management and emergency services. Other services such as the maintenance of roads and land use policy planning are managed individually by the City and County. Also like Simcoe, lower tier municipalities provide water, waste water and development services. Additionally, while the County requires MMAH approval of its Official Plan, the City of Peterborough has the authority to approve its own Official Plans or Official Plan amendments. Only the one other single tier municipality in the Greater Golden Horseshoe – the City of Toronto – has the same authority.

Table 16. Distribution of Population across Municipalities, Peterborough Case Study Area (Statistics Canada, 2011).

		POPULATION			CONTRIBUTION TO REGION'S GROWTH
GEOGRAPHIC REGION	MUNICIPAL TYPE	2006	2011	% CHANGE	%
Canada		31,612,897	33,476,688	5.9	
Ontario		12,160,282	12,851,821	5.7	
Peterborough Case Study Area		131,537	133,568	1.5	100%
Single Tier Municipalities					
Peterborough	City	75,406	78,698	4.4	162.09
Peterborough County					
Smith-Ennismore- Lakefield	Township	17,027	16,846	-1.1	-8.91
Douro-Dummer	Township	6,954	6,805	-2.1	-7.34
Otonabee-South Monaghan	Township	6,812	6,660	-2.2	-7.48
North Kawartha	Township	2,342	2,289	-2.3	-2.61
Havelock-Belmont- Methuen	Township	4,637	4,523	-2.5	-5.61
Cavan-Monaghan	Township	8,828	8,601	-2.6	-11.18
Galway-Cavendish and Harvey	Township	5,284	5,105	-3.4	-8.81
Asphodel-Norwood	Township	4,247	4,041	-4.9	-10.14

Despite its importance as a regional economic hub, the City of Peterborough has not fared as well economically in recent years as other regions in the Greater Golden Horseshoe, including Waterloo and Simcoe. Unemployment in the City has been higher than the provincial average since 2009 while employment earnings have been consistently lower than the provincial median over the last two census periods (Statistics Canada, 2007). A greater proportion of City of Peterborough residents spend more than 30% of their income on rent than residents elsewhere in Canada - a function of the low incomes rather than high rents (City of Peterborough Planning Division, 2011; Wedley, 2013b).

In recent years, the County's population has declined by approximately 3.1%, while the City grew by 4.4%. Notwithstanding the gains and losses in population due to the 2008 annexation of County lands by Peterborough, the region as a whole experienced a relatively slow net growth of 1.5% over the 2006-2011 time period (County of Peterborough Planning Department, 2013). Previous periods have been

characterized by higher rates of growth, although these rates have typically been slower than the provincial average. Peterborough's relatively slow growth has been attributed, in part, to the province-wide trend for growth to concentrate in larger urban centres (County of Peterborough Planning Department, 2013). Peterborough, like other regions in eastern Canada, has witnessed an out-migration of young people who are moving west in search of work (Mehta, 2012). Rate of growth projected for the Peterborough area is the lowest of all regions in the Greater Golden Horseshoe, and particularly lower than growth rates projected for Waterloo and Simcoe (City of Peterborough Planning Division, 2009b).

Historical economic and urban development in Peterborough, combined with slow population and economic growth has influenced the City's built form. Like the Cities of Kitchener, Waterloo and Cambridge, development in Peterborough was originally concentrated around centralized manufacturing. Post-war suburban growth combined with greater mobility both contributed to an increasingly low density, single use urban form for urban development outside of the downtown core. From 2000 to 2011, single detached homes contributed to 77% of the City's total housing starts (City of Peterborough Planning Division, 2011). A downtown mall, erected in the 1970s as part of the Ontario Downtown Renewal Programme, failed to retain its department store anchor and is increasingly challenged to compete with suburban shopping malls (urbanMetrics, 2008).

Some characteristics of the region have helped to slow the pace of low density urban and exurban development. At 125 km from Toronto, the Peterborough area has not typically attracted Toronto commuters, which in turn has reduced the pressure for the development of scattered bedroom communities compared with communities within the Toronto commutershed, such as Simcoe (City of Peterborough Planning Division, 2009b; City of Peterborough Planning Division, 2011). The extent of the City of Peterborough's commercial suburbanization and corresponding suburban residential development has been offset by the presence of a number of large government and university employers located in downtown Peterborough, including a central office for Ontario's Ministry of Natural Resources, Canada Revenue Agency and Trent University. The City's isolation, combined with the downtown employment has helped to mitigate downtown decline and has encouraged workers to live within city boundaries. Compared with Waterloo and Simcoe, commuting patterns of workers to areas outside of the city-county region are relatively low, with as much as 80% of Peterborough's workforce living within the City (City of Peterborough Planning Division, 2011).

Housing tenure, incomes and demographics in the City of Peterborough have also helped slow Peterborough's peripheral development. Compared with many other communities in the Outer-ring, including Simcoe and Waterloo, Peterborough residents have lower incomes and higher unemployment. In 2011, as many as one in five people in Peterborough was aged 65 or older, a ratio higher than any other municipality in Canada (Mehta, 2012). Post secondary institutions, Trent University and Fleming College collectively attract an additional 13,000 or more students per year. Lower incomes combined with the large proportion of secondary students and seniors have led to a larger than average proportion of rental housing in the City compared with other cities. Much of this rental housing exists in the form of medium density apartment buildings (City of Peterborough Planning Division, 2009b).

Despite the region's demographics and slow growth, almost all new development in the last 25 years has been in the form of low density residential and commercial development. The City of Peterborough has tended to look outward at surrounding townships to accommodate new residential subdivisions and industrial lands and, since 1960, has annexed lands from surrounding townships nine times (City of Peterborough, Land Information Services Division, 2008; Ontario Ministry of Municipal Affairs and Housing (MMAH), 2013). One particular annexation, approved by the Ontario Municipal Board in 1962, permitted Peterborough to annex 2612 ha from the surrounding townships, resulting in a near doubling of the City size (OMB approves Peterborough annexation bid.). In 2008, the City annexed an additional 520 hectares from Smith-Ennismore-Lakefield and Otonabee-South Monaghan Townships as part of an earlier agreement between the City, County, Townships and province (Ontario Ministry of Municipal Affairs and Housing (MMAH), 2013; Wedley, 2010). The most recent annexation was approved by the province in 2011 for the annexation of lands from Otonabee-South Monaghan Township which came into effect in 2013.

City of Peterborough's Growth Management Initiatives

Possibly as a result of lower development pressures compared with other municipalities in closer proximity to Toronto, such as Barrie, Kitchener and Waterloo, the City of Peterborough has adopted few policies and programs to encourage compact, transit supportive urban growth. City planners have acknowledged that, prior to the Growth Plan, municipal management of growth was guided by "market demand and developer readiness" rather than through more active policy and regulatory approaches (Hunt, 2009, p. 9).

The availability of large greenfield areas combined with the low cost of land has historically provided the City with little incentive to make optimal use of space and direct development to lands that can more efficiently serviced. Past annexations had provided the City with "...so much land that it's going to take years for land to be taken up with singles," according to the municipality's Planning Division Manager (Hanes, 2011). In 2009, the City held 1443 hectares of designated greenfield lands (natural areas, hazard lands and floodplains excluded) - enough land to accommodate 72,150 residents

and jobs (City of Peterborough Planning Division, 2009b). With the Growth Plan's growth forecast for the entire City at only 14,300 people and jobs between 2006 and 2031, the City of Peterborough's designated greenfield areas provide an oversupply of land in the amount of 57,850 people and jobs, or approximately four times the land supply necessary for the next 25 years. The oversupply of lands designated as greenfield is significantly greater than that approved by Simcoe County (30,991 to 25,045 people/jobs). Leapfrog servicing of greenfield areas is currently permitted should the lands meet other, unspecified, planning requirements (City of Peterborough, 1981, amended 2009).

One exception to the City's earlier market-driven approach to planning is evidenced in Peterborough's planning activities for the downtown core. Like many cities throughout Ontario, Peterborough has invested heavily in the revitalization of its downtown core and waterfront to combat downtown decline, with an outlay of \$5-6 million since 1989 (urbanMetrics, 2008). To support these initiatives, the City adopted a Downtown Masterplan in 1991 and included this Plan as an amendment (#71) to the Official Plan (City of Peterborough Planning Division, 2009a; urbanMetrics, 2008). The Masterplan provided greater direction in support of a mix of housing, public amenities and adequate infrastructure to accommodate appropriate downtown densities and mixed land uses. This plan was later refined and updated as the Central Area Masterplan to bring it into conformity with the Growth plan in 2009 (City of Peterborough Planning Division, 2009a).

The Growth Plan for the Greater Golden Horseshoe marked a turning point for Peterborough's traditional approach

Box 4. City of Peterborough Growth Plan OPA, 2009

- a) Plan to achieve a minimum density of 50 persons and jobs per hectare for Designated Greenfield Areas and 150 persons and jobs per hectare for the Urban Growth Centre.
- b) Encourage intensification of people and jobs in the Urban Growth Centre, within intensification areas, and along intensification corridors.
- c) Encourage new development in existing built up areas to have a compact form, and an appropriate mix of uses and densities that allow for the efficient use of land, infrastructures and public service facilities.
- d) Provide sufficient land to accommodate an appropriate range and mix of employment opportunities, housing and other land uses to meet projected needs for the Official Plan timeframe.
- e) Encourage the remediation and redevelopment of brownfield sites to uses that revitalize neighbourhoods.
- f) Encourage the reuse and/or conversion of greyfields and underutilized sites.

(Source: City of Peterborough, 1981, amended 2009)

to urban planning in which the majority of its residential growth has been in the form of single-detached dwellings at the City's periphery (Hunt, 2009). In a presentation to the Ontario Home Builders' Association about housing construction under the province's new policy framework, the City Planning

Division Manager, Ken Hetherington acknowledged that the City hadn't "...seen small walk-up apartments or multi-storey (residential) buildings built for 25 years" (Hanes, 2011). Despite concern expressed by staff about the Peterborough's ability to achieve the Growth Plan's density and intensification targets (City of Peterborough Planning Division, 2009b) the City did not seek provincial approval for alternative targets (Allen & Campsie, 2013).

Peterborough Council adopted a Growth Management Strategy Amendment for incorporation into the Official Plan in 2009 (OPA #142). The Strategy adopts Growth Plan policies almost verbatim and provides the necessary policy framework for the City to achieve the Growth Plan's objectives (City of Peterborough, 1981, amended 2009). The amendment, which did not require Ministerial approval, elicited a single article in the local newspaper and was approved by Council with little fanfare or controversy (Wedley, 2009). The new growth management policies provide a high level framework for planning that conforms to the Growth Plan, and commit the City to the development of more specific implementation strategies. Planning for these more detailed implementation strategies is underway through the City's Official Plan review process.

County of Peterborough's Growth Management Initiatives

Like Simcoe County, the County of Peterborough is tasked with providing broad policy direction for a predominantly rural area in which cottage and recreation development contributes to a significant portion of the overall development. Also like Simcoe County, Peterborough County plays a reduced role in water and waste water infrastructure delivery and the development approvals process compared with Regional governments such as the Region of Waterloo. The County of Peterborough's first Official Plan was approved by the Ministry of Municipal Affairs in 1994, four years prior to the Official Plan adopted by Simcoe County. In 2008, the Townships of Asphodel-Norwood, North Kawartha and Selwyn opted to include their local official plans in the County's Official Plan (OPA #3) which the County recognized would lead to greater consistency and coordination for the planning and development of the townships (County of Peterborough, 2013b). The remaining five townships adopted separate Official Plans.

Prior to the Growth Plan, Peterborough County initiated few policies or programs to prevent growth beyond settlement boundaries or to increase the density of greenfield development. County severance policies between 1990 and 2000 provided minimal control over the severance of agricultural lands for rural residential use. During that time, the County saw a ratio of 1.38 new residential lots created per 1000 acres of agricultural land – a ratio higher than that estimated for either Waterloo (0.23) or Simcoe (0.93) during the same time period (Caldwell & Weir, 2002). The 1994 County Official Plan did little to discourage municipal plans for dispersed growth, such as the incremental lakeshore cottage

construction and estate residential development in rural areas (County of Peterborough, 1994, consolidated 2013). Medium to large lakeside residential developments, ranging in size from 44 units to 700 units in unserviced and non-settlement areas have contributed a significant proportion of many townships' total growth (Greater Peterborough Area Economic Development Corporation, 2008).

In more recent years, the County approved a controversial 2005 Fraserville Secondary Plan proposed by Cavan Monoghan Township for a large residential and commercial development in a small hamlet adjacent to an isolated Ontario Lottery and Gaming Corporation facility. With inadequate servicing to accommodate the proposed growth, the township initially approved a proposal to pipe water from a location on Oak Ridges Moraine 12 km away (Pentikainen & Brunger, 2010). Public opposition, economic challenges and planning concerns later caused Cavan Monoghan Council to reverse its decision and approve a significantly reduced plan for development that could be accommodated with existing servicing (Isaacson, 2011).

Release of the Growth Plan in 2006 initially led to strong criticism by County politicians who were concerned about the economic impact of the province's population forecasts, which, by the time of the Growth Plan's release, had already been surpassed (Isaacson, 2009). Whereas the Region of Waterloo embarked on a Growth Management Strategy and the MMAH provided Simcoe with a strategy through its Simcoe amendment to the Growth Plan, Peterborough County initiated no comprehensive Growth Management Strategy as part of its conformity exercise. County Council did, however, adopt a Growth Plan Amendment (OPA 7), approved by the MMAH in 2010, to bring the Official Plan into conformity with the Growth Plan for the Greater Golden Horseshoe. While the Official Plan Amendment recognized the 40% intensification target, it also cited the County's intention to perform an intensification analysis in order to seek a reduced intensification target from the province within 2 years of the Official Plan Amendment (County of Peterborough, 1994, consolidated 2013). To date, however, no alternative intensification target has been granted (Allen & Campsie, 2013). The County did, however, negotiate alternative density targets of 35-40 persons/jobs per ha, with the target of 35 persons/jobs per ha being implemented at the time of the amendment's adoption, to increase to 40 by 2015 or during the next 5 year review of the OP, whichever was sooner (County of Peterborough, 1994, consolidated 2013).

In adherence to the Growth Plan's requirement for the majority of growth be directed to fully serviced urban areas, the County's Official Plan identifies four settlement areas to be the subject of intensification policies – Millbrook (Township of Cavan Monoghan), Lakefield (Township of Selwyn), Norwood (Township of Asphodel-Norwood), and Havelock (Township of Havelock-Belmont-Methuen). The four remaining townships that lack fully serviced settlement areas are assigned no intensification target, either by the province or by the County, yet collectively, these townships have been allocated

almost 40% of the County's population growth (Allen & Campsie, 2013; County of Peterborough, 1994, consolidated 2013; Table 17). While the County Official Plan does provide a general provision for residential growth in hamlets to be directed toward infill and minor expansion, permitted land uses in those hamlets is later limited to predominantly single detached residential "with some limited provision for multiple unit dwellings" (County of Peterborough, 1994, consolidated 2013, s. 6.2.3.3). The absence of lower tier intensification targets contrasts with lower tier municipalities in both Waterloo Region and Simcoe County, all of whom have been assigned individual intensification targets either through Upper tier Official Plans or through the Growth Plan Amendment 1.

Table 17. Intensification Targets of Lower Tier Municipalities, County of Peterborough (Allen & Campsie, 2013).

PETERBOROUGH COUNTY LOWER TIER MUNICIPALITIES	ALLOCATED PROPORTION OF GROWTH ^a (2006-2031)	MINIMUM INTENSIFICATION TARGET
Township of Douro-Dummer	11.3%	0%
Township of Trent Lakes (Formerly Galway-Cavendish and Harvey)	8.3%	0%
Township of North Kawartha	3.1%	0%
Township of Otonabee-South Monaghan	11.2%	0%
Township of Asphodel-Norwood	8.5%	40%
Township of Cavan-Monaghan	16.6%	40%
Township of Havelock-Belmont- Methuen	9.2%	40%
Township of Selwyn (Formerly Smith- Ennismore-Lakefield)	31.7	40%

^a County of Peterborough Official Plan

Lower tier municipal growth management initiatives

With little policy guidance from the County, lower tier municipalities have historically pursued individual economic objectives with limited obligation to consider their broader spatial implications. The form and location of growth in the townships, prior to 2006, has been largely influenced by the absence of municipal water and waste water servicing and weak township and County land severance policies. Severance policies permitting the division of lands outside of settlement areas is credited with the location of residential, commercial and industrial development in agricultural areas and a corresponding gradual decline of the population of small towns such as Havelock (Township of Havelock-Belmont-Methuen, 2004, p. 7). The lack of municipal servicing has required most townships to set upper limits to development densities to ensure proper assimilation of sewage effluent through individual septic systems, which in turn have helped to encourage low density, dispersed growth.

Growth in the townships has also been guided by an absence of policies to encourage or require medium or high density development in areas where municipal water services are available. Prior to the Growth Plan, most townships had designated little to no lands for medium to high density residential even in areas with suitable servicing capacity. As recently as 2002, for example, only one lot in the town of Havelock was designated for high density residential use, and no areas were designated for medium density residential use (Township of Havelock-Belmont-Methuen, 2004).

One of the most significant developments in the townships was the 1999 approval by Cavan Monoghan Township Council for the location of an Ontario Lottery and Gaming (OLG) Corporation facility at a rural race track south of Peterborough. The facility has been credited with encouraging expansion of the unserviced hamlet of Fraserville in an area immediately south of the City of Peterborough's southern border and contributing to inefficient land use patterns immediately south of the City's border (Pentikainen & Brunger, 2010). Located near the Peterborough airport, a provincial highway and a prospective highway 407 expansion, the area was originally planned to be the economic focus for the township, which commenced a planning process to enable a large scale, commercial, residential and recreational development and associated municipal servicing (Pentikainen & Brunger, 2010). This process led to the adoption of the 2005 Fraserville Secondary Plan by Cavan Monoghan Council and approved by the County, to permit the construction of 2,700 residential units, industrial lands and a large entertainment development including a golf course, and an entertainment complex. Significant public opposition to the controversial plan to pipe water from the Oak Ridges Moraine to service the development as well as public concern over its conflict with objectives of the Growth Plan to make use of existing infrastructure, protect agricultural lands and site development in already built up areas, may have contributed to the Township's later decision to shelve the Plan (Churchyard & Caldwell, 2011; Eagle, ; Isaacson, 2011).

Despite initial frustration by some township councils regarding the province's population forecasts (Isaacson, 2009), by 2012 all eight of the townships had adopted some form of modified Official Plan to bring them into conformity with the Growth Plan. The County Official Plan amendment adopted in 2010 served as the conformance mechanism for those townships whose local policies were integrated into the County's Official Plan. For the other four townships, amendments to their Official Plans incorporate general policy requirements of the Growth Plan, most notably: 1) the direction of the majority of growth to primary settlements and hamlets areas with existing infrastructure, 2) the restriction of severance activity and development in areas with limited or non-existent water and wastewater infrastructure, 3) encouraging intensification and redevelopment in hamlet and settlement areas, and 4) encouraging a mix of both residential and employment land uses in hamlet and settlement areas. The

Official Plan for Cavan Monoghan, for example, redirects the majority of its anticipated population growth from its original growth area Fraserville to the township's only serviced settlement area, Millbrook (Township of Cavan Monoghan, 2015). Other policies demonstrate a more comprehensive plan for encouraging a mix of residential and employment development. The Official Plan of Cavan Monoghan, for example, established the target of one new job for every three additional residents and provides policies for the revitalization of Millbrook's commercial core, the encouragement of mixed uses, alternative forms of transportation (Nopper, 2011; Township of Cavan Monoghan, 2015).

While most township Official Plans state generally that they will encourage a range or mix of housing types, specific residential policies tend to limit rather encourage that mix. Residential land use policies in the Official Plan for Trent Lakes (formerly Galway Cavendish and Harvey), for example, favour single detached units as the primary from of dwelling type rather than encouraging a mix of densities to be limited only by servicing limitations (Township of Galway-Cavendish and Harvey, 2011, s. 5.3.4). The Township's provisions for non single detached units such as duplexes, tri-plexes and quadplexes are specifically encouraged to "to include acceptable landscaping standards, and sited so as to minimize their effect on adjacent uses, particularly single unit dwellings" (Township of Galway-Cavendish and Harvey, 2011, s. 5.3.5). Other townships, such as Cavan Monoghan, institutionalize the single detached unit as the preferred housing type by requiring that all new development in the township will reflect the existing built form (Township of Cavan Monoghan, 2015, p. 4). As much as 75% of residential development for the town of Millbrook within Cavan Monoghan township is planned to be low density, with maximum density targets of 35 residential units per ha, and restrictions on building height to 3 storeys (Township of Cavan Monoghan, 2015).

Barriers to Growth Management in Peterborough

A total of 23 barriers to Growth Plan implementation were identified by Peterborough media reports, planning documents and planners (Appendix C. Reporting Frequency 9). Like the Waterloo and Simcoe case studies, interviews and documents reported Peterborough's unique context as a newly identified barrier. In the case of Peterborough, the barrier related to the region's physical and economic context, including its slow growth, a predominantly rural and low density existing built form and a lack of water and wastewater infrastructure.

Of the 23 identified barriers, 12 barriers were identified as key barriers, 10 of which were reported by at least 10 percent of interview and document sources (Table 18). Key artifacts identified included unsupportive engineering and planning standards, incompatible provincial decision making, policy and investment and high cost and complexity to retrofit existing low density built form. These

barriers were reinforced by particular planning and societal environment barriers, including a lack of political will, staff beliefs regarding the incompatibility of high density development with local character, and an absence of commitment to growth management by developer. NIMBY, consumer preference for suburban development and auto dependency were identified as key societal barriers. Key local contextual factors identified by interviews and documents included slow economic growth, amenity migration and rural built form.

Two additional barriers – insufficient planning capacity and inefficient or inconsistent administration – were identified as important intervening barriers following a critical review of the local contextual and historical information. Inconsistent administration was found to serve as an intermediary barrier through which the lack of political will functioned to reinforce low density urban form, while insufficient planning capacity was considered to be an additional contributing factor that exacerbated the inconsistent administration of growth management policies. The relationships between barriers is presented in Figure 9.

Table 18. Peterborough Case Study Area: Key Barriers to Growth Plan Implementation.

B	ARRIER TYPE	BARRIER	
A	Local Plans and Policies	Unsupportive engineering and planning standards/policies	
A	Federal and Provincial Plans and Policies	Incompatible provincial decision making, policy and investment	
A	Built Environment	High cost and complexity to retrofit existing low density built form	
P	Characteristics of the Implementing Agency	Lack of political will	
P	Characteristics of implementing agency	Staff view high density development as incompatible to local character	
P	Characteristics of implementing agency	Insufficient planning capacity	
P	Characteristics of implementing agency	Inefficient or inconsistent administration	
P	Characteristics of implementing agency	Staff view their role as dependent on the market	
P	Characteristics of Developers	Development industry not committed to growth management objectives	
S	Property Ownership and Rights Advocacy	Presence of strong NIMBY lobbying against infill and intensification	
S	Consumer Preferences	Preference for low density suburban form	
S	Consumer Preferences	Auto dependency and absence of travel options	
	Local Context	Unique physical conditions (e.g. slow growth, amenity migration and rural built form) and demographics challenge intensification	

A: Artifact; P: Planning Environment; S: Societal Environment

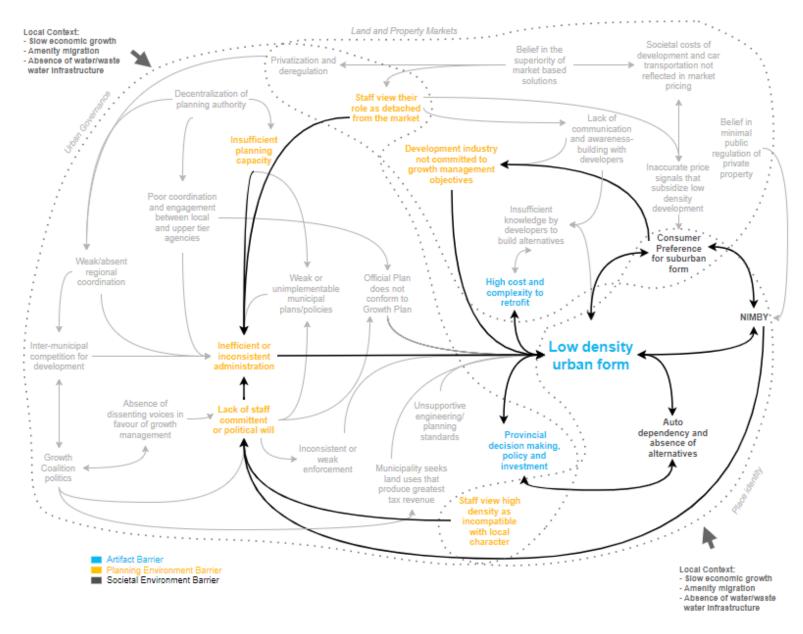


Figure 9. Peterborough case study region: Model of key barriers to Growth Plan implementation. Bold text indicates key barriers identified by at least 10% of interview respondents or planning/media documents. Arrows denote positive or reinforcing relationship.

Model of Barriers to Growth Management for Peterborough

Local Context

In contrast to the challenges associated with managing growth in a rapidly urbanizing rural area like Simcoe, municipal planners in Peterborough reported a different set of challenges resulting from the region's slow population and economic growth. Peterborough planners questioned the appropriateness of a plan that placed greater expectations on developers in a region experiencing little development activity. Economic stimulus, not growth management, some planners felt, would be more relevant to the Peterborough area:

"Eastern Ontario is a somewhat economically depressed area that would stand to benefit from an economic development growth plan like the Northern Ontario one, but at the same time there are areas of development, which would benefit from the philosophies of the Greater Golden Horseshoe Growth Plan" (Planner, Upper tier municipality).

These sentiments echoed a position put forward by City of Peterborough planning staff in a 2009 report to Council that argued that the City had more in common with the Northern and Eastern regions of Ontario outside of the Greater Golden Horseshoe than those cities within the GGH:

"From a growth management and land use planning perspective, the dissimilarities between Peterborough and the rest of the GGH could mean that major planning issues affecting the rapidly growing urbanized portions of the GGH are less relevant in the Peterborough context. Consequently, implementing Growth Plan policies that are really tailored to addressing issues relevant to places such as Barrie, Kitchener or Guelph may affect Peterborough's ability to maintain itself as a complete community as it exists today. Therefore, should the opportunity arise, it may be worthwhile to explore Peterborough's place in the provincial Growth Plan framework. At the earliest, this could be done at such a time when a Growth Plan is prepared for eastern Ontario" (City of Peterborough Planning Division, 2009b, p.5).

Peterborough's small size and slow population growth, planners asserted, challenged staff's ability to solicit public and political support for new planning objectives under the Growth Plan. Securing public and political support for compact development was difficult when the drawbacks of the status quo were imperceptible and the benefits of new development forms might not be reaped for many decades. Peterborough's slow rate of development yielded few example success stories which in turn hindered the development of political support:

"But the one thing with us is, we don't build out subdivisions in two years. We're kind of like the tortoise in the tortoise and the hare story, like we just kind of comfortably knock off 400 houses a year, and that's a good year. So, a lot of times you don't see the fruits of your labour until 5, 6, 7 years down the road. So you don't get that quick, measurable success or failure" (Planner, Single tier municipality).

Planners also described a general public for whom the drawbacks of traditional growth, such as traffic congestion and loss of natural areas, were not readily apparent. One planner noted, for example, that short average commuting times within the City of Peterborough made it difficult to argue in favour of the benefits of transit-oriented densities. Further, given the region's slow growth, the prospect of developing complete communities and more efficient transit was described by many planners as unlikely in the short term regardless of any achievements toward intensification and density targets:

"Again, the feasibility of [complete, transit-oriented communities] is really questionable because you need a certain threshold in order to have a complete community or a transit-friendly [community], again with the slow growth area, we may have a plan of subdivision for ten lots, and someone's not going to put a commercial component with that right? And ten lots are not going to all of a sudden add to a community being transit-friendly, again, this is one of those ones that are big urban and not applicable really to the County. We don't really have any public transit in our four villages – there is a bus that goes from Peterborough to Lakefield, that's about it. So we're not on that scale, you know there's a scale of economy, which isn't in existence here yet and probably won't be for quite some time" (Planner, Upper tier municipality).

The pressure to attract development in a slow growing region, many planners acknowledged, was an obstacle that impacted political support for growth management initiatives. In a study of planning challenges associated with rural-urban fringe municipalities, Pentikainen and Brunger (2010) reported that the drive for new municipal revenue sources was a primary factor in Cavan Monoghan township Council's approval of an Ontario Lottery and Gaming development, and subsequent plans for residential and entertainment development, in the unserviced hamlet of Fraserville. Planning regulations that directed development within settlement boundaries and required higher densities and levels of intensification were perceived by planners as particularly challenging for Peterborough County's small rural, and fiscally constrained municipalities where such requirements could be perceived as constraining needed growth:

"The limited growth opportunities in rural Ontario is a major issue for the Growth Plan that needs to be addressed by proper authorities in the future. ... Because it is very hard to argue

against the settlements being the focus, where the infrastructure is and making the best use of that infrastructure. But ...it is pretty tough to make it go and balance your books in rural communities if your development opportunities are pretty much zero...

The obstacles I see conferring Smart Growth strategies would include politics, as the number one. I'm particularly referring to rural politicians and the political process. [Rural municipalities] are struggling for their survival. They don't have a very large commercial or industrial assessment base. Whatever they can get to offset the residential tax base is desirable, but it may not be an approved initiative in terms of Smart Growth" (Consulting Planner).

Like Simcoe County, the physical amenities of Peterborough County were also found to create unique development pressures that were not accounted for under the Growth Plan. Isolated recreation and resource-based developments in rural areas, such as the Kawartha Downs casino, golf courses, ski hills, and lakeshore developments attracted accessory residential developments that challenged growth management for the broader region. In reviewing the impacts of locating a large recreational development on Fraserville's unserviced lands, the Environmental Commissioner of Ontario noted that the County had failed to develop a watershed plan to ensure appropriate consideration of ground water resources and lake carrying capacities in land use planning decisions (Environmental Commissioner of Ontario, 2011b).

Some planners recognized the inadequacy of Growth Plan policies to protect natural and agricultural areas from development:

"[The Growth Plan] talks a lot about ... green spaces related to things of a provincial interest. Green spaces that might have some provincial significant to them, and then you couple it up with the Provincial Policy Statement that deals with development in proximity to areas of significance that are identified in the PPS. But there are a lot of other areas of green that aren't necessarily of provincial significance...So it's still left up to the individual municipality to sort of make its own determination as to which green spaces, if they're not provincially significant, identified explicitly in the Growth Plan or in the PPS, then each municipality, it's their own call in terms of what gets protected and what doesn't. So there's more green space out there that could be protected than just provincially significant green space" (Planner, Single tier municipality).

Consumer Preferences

Consistent with the other case study regions, Peterborough planners identified consumer preferences as a significant barrier to their ability to implement policies to manage growth. City of Peterborough planners described the new greenfield density requirements as a "sharp break in the traditional residential development patterns of the City" (City of Peterborough Planning Division, 2009b, p. 53). With an absence of market demand for higher density housing, City planners identified designated greenfield density target as the most challenging of all the growth Plan targets for the City of Peterborough to achieve

Like the planners interviewed from Simcoe, planners in Peterborough County and the City of Peterborough described the region as having a strong rural or small town identity that was tightly associated with low density, single detached urban forms. Both planners and planning documents described housing preferences in the County that favoured large single detached homes on 50-100 wide lots, hobby farms and lakeshore cottages. The entrenched low density consumer patterns were described by one planner as magnifying over time:

"For our municipality, the lifestyle is entrenched. Cavan-Monaghan does tend to have a better-educated, higher-income population, which leads to certain lifestyle choices with the larger lots. We have large – when people build homes today, I would say by far, the majority are bigger than 2400 square feet, you know? And in my younger days, if you lived in a 1200 square foot house, that was kind of the norm – that is so far, not the norm these days. People drive everywhere, and there's expectation of a higher level of service. So it's that whole lifestyle thing" (Planner, Lower tier municipality).

The interplay between slow growth and consumer preferences was frequently described by planners as a significant challenge to their ability to implement Growth Plan policies. The absence of a market for high density housing, although expressed by municipal planners across all three case study areas, was a particular concern for planners in the Peterborough area. Some planners expressed discomfort with any actions that would potentially restrict development in a slow growth community like Peterborough, citing the importance of each individual development proposal to the City's overall growth and the potential impact of developer hold-outs. As well, many Peterborough planners perceived themselves as separate agents to property markets rather than playing a hybrid role between private and public interests.

"So I think for me, that's the most troubling part about [growth plan targets], is that we've always tried to stay out of market-related types of issues" (Planner, Single tier municipality).

"Realizing that growth is right now here is pretty slow, we may not see the effectiveness [of the Growth Plan] for quite some time - it's all market-driven. And even though sometimes there's a market, people just hang onto property because they don't want to invest in the infrastructure, the development costs, and they'll just hang onto it for a long period time and then sell it eventually" (Planner, Upper tier municipality).

A perception by planners of their limited influence over markets, combined with a prevailing consumer demand for low density forms of development and limited development pressure led some planners to express concern that the Growth Plan targets may not be achievable:

"I still struggle greatly, with how we're going to achieve 50 people and jobs per hectare in our greenfield areas. You know, the province has kind of shown us some pretty pictures of what it looks like, but man, I just don't see it happening, given our demographic makeup and getting back into the market kind of things. I think we've done really good the last few years in terms of medium-density but again, you can plan for all the medium-density in the world, but if it doesn't get built, what are you achieving? So that's the biggest challenge in my mind, for us, is that target" (Planner, Single tier municipality).

Property Ownership and Rights Advocacy

In addition to consumer preferences, opposition to compact development by affected neighbourhoods (NIMBY) was frequently cited by Peterborough area planners as a challenge for growth management through its impact on political decision making. Many planners pointed to the rural or "cottage county" identity of the region as driving this challenge for managing growth. In contrast to the Simcoe area, where a conflict between rural identity and growth management planning was also identified, most planners from the Peterborough area described the conflict as a public education challenge rather than a problem with the Growth Plan itself:

"Well the challenge is the whole public acceptance. As I said, Milbrook is currently the only serviced area [in Cavan Monoghan Township] so that's, at this point, where all the intensification has to go and there is resistance in term of parking, noise, a change in... tenure. So that's the real challenge there. People have an expectation that if you're going to do alternative forms or types of housing, that that should be in a new area, you don't mix that in with the existing neighbourhood...In some areas in Milbrook there are the historic

homes. It's quite a mix but there's a perception that they've got this history that by bringing in new development that might be a different style, it's not compatible. So, that's the challenge" (Planner, lower tier municipality).

Certainly, the problem is that, the traditional way of planning is to separate. To make sure that nobody's going to have anybody next door that might decrease their property values or you know, mix the "riff-raff" with the "hoity-toities". You know what I mean. And, so trying to change that, is a challenge. It's trying to introduce different, and really just more in the way of changing policies to make it more possible is part of it, but the other part is certainly the approach taken by those who are already there, versus those who might be coming in. There's a real tendency for people to say, "I bought it because I wanted it to be this way, and now you're trying to change it and I'm going to fight you tooth and nail because that's not why I bought this property." And because the planning process is geared to public reaction, and public reaction tends to be very, very selfish, it makes a problem for those communities who are trying to be more proactive" (Consulting Planner).

Peterborough planners described a level of NIMBY that challenged even the most modest increases to density within the built boundary, such as a single triplex or small scale semi-detached residential infill development. Planners described numerous examples of higher density development applications being supported by both staff and Official Plan policies, but denied by Council due to widespread community opposition. While in some cases, the decisions to deny the applications were appealed and overturned by the OMB, public opposition contributed to a lengthy and expensive planning process:

"One [failed rezoning application] was to convert a single-detached dwelling to a triplex. The property is located on a county road, which is an arterial road, it's across the road from a school, it's within walking distance to the arena, the library, the community centre, liquor store, the grocery store — you can walk everywhere, technically you wouldn't need a car. The neighbours went... crazy. Yep, so that application did not get approved based on traffic, and the fact that there were kids playing in the street, which is beyond me. But in terms of absolute planning, [the application] makes sense, it's permitted in the Official Plan, it met all the criteria in terms of what you want, in terms of location. It met the zoning by-law requirements for setbacks, minimum unit size, parking spaces — all of the things that we would look at in a more traditional planning sense, but in terms of public acceptance, it

wasn't there, and so council – this is an election year... refused to approve the amendment and so, now we have an appeal at the board" (Planner, Lower tier municipality).

"In Lakefield, there was a greenfield development, and they were proposing higher densities. They were also proposing a real mix of uses, they were having small frontage single-detached, they were having some townhomes, they were having a retirement residence and they were having like a nursing or sort of like an advanced care facility. And they were also reserving some blocks maybe for some future apartments, even more dense, and the neighbours really did not want to see that. It had been within the village limits, but undeveloped forever. And then all of a sudden there was something that was promoting Smart Growth, a mix of uses, there was a little bit of commercial too – they were putting in some professional health-related offices in this development. So there was a commercial aspect to it as well. You know, the people in the general vicinity just went nuts – went crazy. There was an appeal to the Ontario Municipal Board, but it finally got resolved and development is going to be able to proceed. But again, that's one of those examples where you know it just takes one person to delay a project 6 months or a year or sometimes even to tumble the whole project" (Planner, Upper tier municipality).

"It's a challenge to balance on one hand, both the people and the politicians are into the preservation of agriculture land, and the environment, but at the same time they're telling me yes, we want more growth in Millbrook, but don't do it on the Oak Ridges Moraine, don't do it on prime agricultural land, don't intensify because "we don't like it". The box is very small, so we don't have any successes at this point in time" (Planner, Lower tier municipality).

Characteristics of the Implementing Agency

Lack of political will to support the policies, programs and incentives necessary for compact growth, as well as a lack of support for the development applications that implement those policies, was identified by Peterborough planners and in media reports (e.g. Isaacson, 2009) as a significant obstacle to Growth Plan implementation. A number of planners recognized these pressures as stemming in part from entrenched beliefs and opinions of elected officials, combined with receptiveness to public opposition.

There's a certain amount of resistance when you're talking to the political entities, you know, your council members, about changing the way we're doing things. For years and years and years, we've gone along sort of the same path of... developer comes in, what do

you want? Ok, does it fit? Let's move on, get it approved. All of a sudden there's a shift in philosophy, and whenever you have that shift in philosophy, you've got to get buy-in. And you got to get buy-in at the staff level and at the political level" (Planner, Upper tier municipality).

Peterborough area's economic challenges were also described as an important factor that influenced political support for growth management initiatives. Central and eastern Ontario face "extreme reliance on residential tax assessment" because of limited employment development that has resulted in an over dependence on residential taxpayers to pay for local services and infrastructure (Natural Capital Resources Inc, 2012). Insufficient tax revenue has reduced the City of Peterborough ability to provide basic active transportation infrastructure, such as sidewalks on both sides of the street (Wedley, 2013a; Wedley, 2013c), and transit service improvements such as extended days of operation (Kovach, 2015).

With the financial imperative to fund upgrades to infrastructure through development charges, elected officials in the lower tier municipalities of Peterborough County faced significant pressures to approve growth projections and development proposals, even if they failed to meet Growth Plan objectives. In an update of Cavan Monaghan township's Official Plan, for example, the township and County approved a population target that exceed the Growth Plan target and an expansion of the Millbrook's settlement boundaries to accommodate a transfer of growth from Fraserville that was approved prior to the Growth Plan (K. Ellis, 2012; Township of Cavan Monoghan, 2015). In reviewing a subdivision application for the newly expanded area, Cavan Monaghan Council recognized that the growth was necessary to fund improvements to an aging wastewater treatment plan in Millbrook ("Residents speak out on proposed Millbrook subdivision".2015).

Some interview respondents felt that township politicians were particularly susceptible to the promise of economic growth in their approval of the Fraserville Secondary Plan, in spite of significant public opposition (Isaacson, 2011), a problem that was exacerbated by disassociation from the true costs of servicing different land uses as a result of dependence on casino revenues (Churchyard & Caldwell, 2011). Describing the Fraserville development as a leapfrog development set to become "a Las Vegas of the North", one consulting planner acknowledged that the community will compete with the City of Peterborough by luring residents and jobs and will make it difficult for the City to meet its intensification and density targets. Growth machine politics were described as critical driving force behind the Fraserville development:

"I think there has been a major effort by a small group of smart developers with council, to turn [Fraserville] in to a major growth centre. But it required full services; they got full

services and the development is going ahead. The planning documents aren't reflecting the development at this location, but the reason it is happening is not because of the planning documents; the reason it is happening is because of all the other things – the good politics municipally with the provincial politicians" (Consulting planner).

Peterborough planners also questioned the suitability of Growth Plan targets in light of the region's unique demographics when compared to other regions in the Greater Golden Horseshoe. With the seniors and students comprising the majority of the region's population growth, a City of Peterborough planning report described a number of technical challenges in meeting the Growth Plan's intensification and density targets (City of Peterborough Planning Division, 2009b). One of these challenges pertained to the fact that students were not counted in density targets since they are not permanent residents, but still had to be accommodated – a challenge facing the Waterloo Region as well. A second challenge unique to Peterborough was planning for senior households, which tend to be smaller than average, and therefore require more units to accommodate the same size population as other demographic groups. Moreover, senior's residences do not count toward Growth Plan density targets because they are not considered individual units. The report claimed that the density required to accommodate the high senior and student population combined with smaller household size associated with these groups will result in a denser built form than most other areas in the Greater Golden Horseshoe (City of Peterborough Planning Division, 2009b).

Peterborough planners reiterated the importance of demographics in achievement of Growth Plan targets. Many planners felt that the targets were unrealistic for their municipality's demographic makeup, with one planner dismissing the intensification and greenfield targets as a "numbers game".

"...I still struggle greatly, with how we're going to achieve 50 people and jobs per hectare in our greenfield areas. You know, the province has kind of shown us some pretty pictures of what it looks like, but man, I just don't see it happening, given our demographic makeup and getting back into the market kind of things. I think we've done really good the last few years in terms of medium-density but again, you can plan for all the medium-density in the world, but if it doesn't get built, what are you achieving? So that's the biggest challenge in my mind, for us, is that target" (Planner, Single tier municipality).

Planners also acknowledged their own reluctance to embrace new development patterns out of concern for their marketability and impacts on traffic. In spite of the fact that Peterborough has been found to have the smallest gap between its existing density of people and jobs/ha and the density required by Growth Plan compared with other outer-ring urban growth centres (Allen & Campsie, 2013), planners

were skeptical about their region's ability to achieve the Growth Plan's intensification and density targets. A large, new urbanist development proposal in the City of Peterborough, for example, failed to secure staff support in part because of its novelty and staff's uncertainty about its potential impacts:

"So, in part, we didn't want them to come in with 1000 homes of rear lane product off the bat, but in part, it was also I think because we still had other outstanding issues that had to be addressed before we could entertain such a large-scale development. So, scoping it down to 100 lots or so was a fairly sort of safe compromise to allow us to test this sort of development land use pattern" (Planner, Single tier municipality).

Like Simcoe, some Peterborough planners linked more compact growth with the demise of the local rural identity characterized by large lots and ample green space:

"Anyway, that's a problem, trying to intensify something that is really, pretty much as intense as it gets, without completely overhauling the whole sense of community, and the whole heritage of - and sense of place that people have. The other problem is that, what it means is that green space will be taken up, because the areas that are not developed are the green spaces – the area where the trees grow, and where kids can ride their bikes and collect frogs and do whatever, even little villages, and when you get rid of those in favour of paving it over for intensification, you lose a lot. You lose the feel – what people I think, need for their heart and soul, to be able to live as human beings as opposed to, you know, in little cubicles. So I find that as a real problem" (Consulting Planner).

"One of the downsides of intensification is that it is a very nice wiggle word, and it can be used to justify undesirable things in existing neighborhood where the character is perhaps worth preserving. But this changes from municipality to municipality. The best example on that would be justifying small lots within an existing neighborhood that had a large lot character. Depends on who writes the report sometimes. But a profound effect on that could be character of the neighborhood" (Consulting Planner).

Characteristics of Developers

Planners also described developers as reluctant to fully embrace alternative forms of development and higher densities and who continued to rely on traditional urban forms and segregated uses. Examples of intensification efforts described by planners emphasized a practice by developers of reducing lot sizes for single detached units to achieve density requirements, but an absence of a full range of compact built forms and configurations, such as stacked townhouses and midrise apartments.

"...recently I received a plan of subdivision that came in for this area, and it, well depending on the assumptions it used, it does achieve sort of the densities that we're looking for. But it doesn't necessarily provide the mix of land uses necessarily that we're looking for, or the mix of housing types that we're looking for. They attempted to come in and basically put in as many small lot singles, you know, 27 to 30-foot singles, as they could in the area, rather than putting in some maybe, medium-density apartment buildings or walk-ups or what have you, and stuff like that. I think if there's going to be a challenge in the greenfield area, it's going to be what form does that density take? Because I think there are a number of different ways to achieve the compact community that we're looking for. But it'll boil down to a debate over what form it actually takes" (Planner, Single tier municipality).

"So, it's going to take a lot of time to change [the existing suburban] built form, and also to be able to move back towards using some of those older structures. For example, you know, fire code is a real problem, and renovation costs are a real problem in some of these old buildings, that there's a huge opportunity to revitalize the downtown, but at the same time, the cost to do that is, can be very, very high. The developer would rather just knock the thing down and start again, and build a box store, you know, put a Shoppers Drug Mart on the main street, and one level and whatever, than they would like to renovate and revitalize the downtown" (Consulting Planner).

Low land prices, increases in rental vacancy and consumer demand were identified as the reason for a relatively slow starts for multi-unit residential development in the Peterborough Census Metropolitan District (CMHC, 2014). With limited demand for more compact housing, a 50 year supply of designated greenfield (City of Peterborough Planning Division, 2013), and strong public opposition to medium density developments, developers have had limited incentive to invest in infill projects or higher density forms.

Federal and Provincial Plans and Policies

Peterborough County, like many other municipalities in the outer ring of the Greater Golden Horseshoe, including Simcoe County, have sought alternative density from the province. A lower greenfield density target of 35%, to increase to 40% in 2015, was approved by the province, permitting new development to continue at densities too low to support basic transit (Allen & Campsie, 2013). As many as four of the Peterborough County's lower tier municipalities – Township of Douro-Dummer, Township of Galway-Cavendish and Harvey, Township of North Kawartha and Township of Otonabee-

South Monaghan have also been exempted from the minimum intensification target because they had not delineated a built boundary.

Findings by Allen and Campsie (2013) suggest that by 2031, the overall density of urban development in the Greater Golden Horseshoe will vary little from the status quo. The study identified the lower density and intensification targets granted to municipalities across the Greater Golden Horseshoe as a significant factor in the likely failure of the Growth Plan to achieve its goals. Following the release of the Neptis report, Environmental Commissioner released a cautionary media release stating that Ontario's Growth Plan for the Greater Golden Horseshoe was not on track to meet its goal of curbing urban sprawl in the region (Environment Commission, 2013).

Provincial approval in April 2005 (one year before the release of the Growth Plan) of the Cavan-Monaghan revised Official Plan containing the Fraserville Secondary Plan amendment also highlights a conflict between the Growth Plan's objectives and Ontario Ministry actions that conflict with those objectives (Pentikainen and Brunger, 2010). Following that approval, in 2007 the province approved the Environmental Assessment for the proposed water and waste water servicing, and the federal and provincial governments earmarked close to \$20 million in infrastructure funding to facilitate the project. Under public pressure, Cavan-Monoghan Council has since abandoned its servicing and growth plan for Fraserville, however the original approval of the project by municipal and provincial authorities was noted by one planner as inconsistent with the Growth Plan objectives:

"On the outskirts of Peterborough, 10 minutes out of town, is an existing racetrack called Kawartha Downs. It is just right on edge of a little rural hamlet called Fraserville, which has a few homes and a gas station on private services. ...Developers and the politicians saw an opportunity to initiate a major development at this location, but it was all predicated on the installation of full service and had to be approved by the province – Ministry of Environment. So there has been quite a land assembly by the private sector in that location, and you can imagine the behind the scenes actions that has happened. Anyway, what has happened locally, this isolated location and entertainment centre will have full services approved by the province on a line extended quite a distance within that rural setting. It will likely become a Las Vegas of the North, which is great for the region but lousy for the City of Peterborough. It is a leapfrog development outside and I don't think it is smart, in terms of Smart Growth, but the City has approved the [water pipe] line – major politics involved" (Consulting Planner).

Local Plans and Policies

Municipal Planners in the City of Peterborough emphasized a challenge associated with zoning by-laws and engineering requirements that were incompatible with the Growth Plan's objectives to encourage intensification and a mix of housing at higher densities. Unsupportive local policies were cited as requiring planners and engineering staff to come to a common agreement about minimum standards and acceptable approaches to facilitate new development patterns and densities.

"Well, I'll go back to the subdivision example in the north-end, because that was years in the making. Even just trying to convince different utilities and engineers here, that you don't need 'x' amount of metres for a right-of-way, you know. You can get this [indicating on map], and if you move your water main here and joint trench with these, then we can reduce that. Yeah, it was tough. And I think if you talk to any of them, they're still not convinced that it will work. Again, snow plowing is a big one, right? Like with the rear lane way, should it be private, should it be public? We fought that for months. The different tours down to other communities where they've done these types of development – this is brand spanking new for us – there was a lot of back and forth on a lot of the technical servicing issues" (Planner, Single tier municipality).

"As an example of this, we've had through a land use planning exercise where we were receiving applications now where developers are looking to implement sort of alternative development standards. And they are looking to implement narrower road right-of-ways, smaller lot sizes, that sort of thing, and part of it is in response to Places to Grow legislation. But through that, the concerns that engineering and utility sort of professionals are dealing with on these types of applications is that ...they have certain minimum standards that they have to adhere to in terms of the placement of their underground utilities. In the past, everyone just sort of had their own utility in their own trench in the road, and they were happy that way, and now you're forcing people to work together and to try and find their own space within a common utility trench. And that type of change can be difficult to navigate and try and make happen" (Planner, Single tier municipality).

Opportunities to strengthen other municipal policies to support alternative modes of transportation and transit support densities have been identified by the public, media and Peterborough's Social Planning Council. In a report prepared for Peterborough's Social Planning Council, Throop (2010) (2010) recommended the City improve its planning approaches for alternative forms of transportation, including adopting a more ambitious target for transit's modal share from 6% to 15% by 2021, and land

use planning policies to improve walkability, such as sidewalks and commercial building setbacks. Citizens have expressed concern regarding the City's proposed parkway expansion, citing concerns about induced demand for car travel over alternatives and loss of park and trail space (S. Frank, 2013).

Summary

Planning in the Peterborough case study region has been largely influenced by slow growth, which has translated into the prioritization of economic development over planning, particularly in the smaller rural municipalities. Development industry and consumer preferences conflict with growth management objectives to create significant political pressure for traditional, low density development. These challenges were further exacerbated by a provincial policy framework that failed to hold the region to the Growth Plan's intended intensification and density standards.

Comparison of Models

While the generic barrier models (Figure 3 and 4) identified a total of 31 known or potential barriers to growth management, the results of this research suggest that only a subset of these barriers function as key barriers to define local responses to growth management. Moreover, different regions were found to demonstrate different patterns of barriers and barrier interactions across societal, planning and artifact scales.

A small subset of the 10 societal-scale barriers identified in the literature were identified in the case study models as playing a critical role in obstructing growth management efforts. Compared to other societal barriers predicted by the general model, these societal barriers interacted directly with low density urban form rather than through an intervening planning environment barrier or artifact. Consumer preferences for suburban development, NIMBY and auto dependency were identified as key societal environment barriers in the Waterloo and Peterborough regions, while consumer preferences and auto dependency were identified as key societal environment barriers for Simcoe. Similarities in key societal environment barriers across the different case studies was not unexpected given the regions' shared, Provincial-scale regulatory and general cultural settings. Case studies were purposefully selected from an area within the outer ring of the Greater Golden Horseshoe and thus operated within some of the same formal institutional frameworks, including the same Provincial land use planning and legal dispute resolution frameworks, and land and property market system. Some general cultural similarities between case study regions were also anticipated given the relatively close proximity of case studies and their location within the same geopolitical region.

Key societal environment barriers for all three regions highlighted the relative importance of place identity, and associated cultural preferences and sense of belonging, as an important institution that directly supported and helped to perpetuate low density urban forms. In Peterborough and Simcoe, the societal scale barriers were reinforced by local contextual factors such as natural amenities, which created the physical conditions that helped to define local identities, structured transportation choices and housing preferences, and motivated powerful actors/actor groups to advocate for low density urban forms. By contrast, the polycentric urban form of the Waterloo region played a limited role in defining or supporting consumer preferences for low density urban forms, and was not a significant influence on the broader institutional logics underlying place identity. The Waterloo region's polycentric form did, however, support the societal scale barrier of auto dependency through the reinforcement of car-oriented transportation choices.

In contrast to the relatively uniform societal environments across the three case studies, planning environments in the different regions demonstrated distinct groupings and patterns of key barriers. Compared with Waterloo, Simcoe and Peterborough demonstrated a greater number of key planning environment barriers, with eight and five barriers reported, respectively. Planning environment barriers formed the largest category of key variables in Simcoe and Peterborough regions, which was consistent with the generic model that identified more barriers at the planning environment scale than at other scales. These barriers were found to have limited overlap with those barriers identified for Waterloo. The planning environment scale was also the scale at which two newly identified barriers, beyond those identified in the literature, were reported in the Waterloo and Simcoe case study areas.

In the Waterloo case study, a total of three planning environment barriers were identified, two of which related to the broader institutions of land and property markets, and one to urban governance. Key planning environment barriers for Waterloo emphasized the role of development industry practices, beliefs and lobbying power in maintaining low density urban forms. Development industry actions and beliefs contrasted with municipal politicians' and planners' efforts to adopt and implement plans that constrained low density suburban development. Local context in the form of polycentric urban form presented technical and political challenges for municipal planners to encourage transit oriented development in locations that made most efficient use of existing and planned transportation infrastructure.

Despite the expectation of strong hierarchical relationships driven by underlying societal barriers, as depicted in the culturalized planning model (Figure 2), patterns of key barriers in Simcoe emphasized the relative importance of the planning environment in serving as an arena of significant influence.

Simcoe's barriers clearly coalesced under the theme of urban governance, specifically around the issues of fragmented municipal decision making, limited planning capacity, and an absence of political and staff support for growth management objectives. Amenity migration in this region was found to reinforce the beliefs and motivations of municipal politicians and planners about the appropriate character and scale of built forms and opportunities for economic growth. Coupled with inter-municipal competition and a fragmented and under-resourced urban governance system, amenity-related private development was found to dictate how and where growth would occur.

Peterborough's key planning environment barriers related to all three institutional themes and specifically highlighted low planning capacity and weak support by politicians, staff and developers for growth management as important challenges for the region. The region's local economic challenges associated with slow growth were found to heighten the effects of the planning environment barriers by influencing the motivation, resources and bargaining power of implementing actors required to implement the types of compact urban developments envisioned by the Growth Plan. The existing rural urban form magnified the importance of place identity, by reinforcing development industry preferences to deliver familiar forms, and legitimizing staff's perceptions that low density development supported the local urban/rural character.

The case study models each depicted a total of three key artifacts, stemming from multiple institutional frameworks. Low density urban form served as a key artifact common to all case study regions, reflecting similarities between case studies in terms of their historical built form and development approaches. Other key artifacts were shared across regions, including the complexity of retrofitting low density built form which was identified as a key artifact in both Waterloo and Peterborough, and inconsistent Provincial decision making which was a key artifact shared by both Simcoe and Peterborough. The relatively small number of artifacts identified as key barriers was consistent with the generic model of barriers which identified artifacts as the smallest grouping of barriers. The small number of key artifacts may reflect the impermanent nature of this scale and the fact that its technical outputs – the processes, plans, policies and products of planning – can be more quickly and easily transformed than deeply rooted cultural beliefs and practices (Healey, 2007; Reimer, 2013).

The generic model depicted local context as an additional set of exogenous variables that could affect barriers at any scale of planning culture and influence how barriers were expressed and reinforced or undermined in different regions. Local context shaped regional patterns of barriers by influencing the conditions within which implementing actors within each region interpreted, presented and implemented the Growth Plan. Direct interactions between local context and low density urban form were apparent in

all case study regions. In Waterloo, the region's polycentric configuration helped to reinforce low density urban form by supporting car-oriented development and indirectly by increasing the cost and complexity to retrofit the existing urban form to accommodate and support higher order transit. In Simcoe, and Peterborough, natural amenities such as natural and rural landscapes in combination with low density urban forms created the cultures, identities and sense of place that influenced physical conditions that helped to define local identities and values.

The relative importance of the key societal-scale barriers in the three case studies may be, in part, a product of their unique relationship with low density urban form. Because of their direct relationship with low density urban form, the barriers do not rely on other barriers to impact low density urban form. The long relationship chains associated with other societal-scale barriers may provide more opportunity for intermediary barriers to be adapted, modified or eliminated at the planning environment scale before they can influence low density urban form. The theory that the length of relationship chains can influence outcomes has been suggested by others, including Pressman and Wildavsky (1984) who theorized that the more interactions or decision making points there are between a policy's development and its implementation, the less likely it is that outcomes will achieve the original intentions. While Pressman and Wildavsky's work focused generally on implementation rather than on barriers to implementation, the theory's basic premise remains relevant to the current research; namely, that a greater number of interactions between two variables creates more opportunities for change agents to weaken, modify or adapt the relationship between the two variables.

The reciprocal relationships between low density urban form and consumer preference, NIMBY and auto dependency presents another rationale for the relative importance of these societal variables compared with others. This relationship is characterized by self-reinforcement or increasing returns in which low density urban forms help to strengthen consumer demand, NIMBY and auto dependency through a range of stabilizing mechanisms (e.g. legitimacy, familiarity and transaction costs), which in turn help suppress the rise of alternatives and support the continued development of low density urban forms.

The reshaping of Growth Plan requirements by the Province to satisfy local municipalities has been identified by critics as one of the single greatest threats to achieving any meaningful transformation in how municipalities plan for growth (Allen & Campsie, 2013; Environmental Commissioner of Ontario, 2015; Neptis Foundation, 2017). While it makes intuitive sense that the weakening of a plan's targets would reduce the likelihood for meaningful change, few studies in the implementation literature have examined the impact of shifting requirements on planning outcomes. A relatively weak empirical

correlation in the plan implementation literature between implementation and consistency with state wide growth management programs (e.g. Ben-Zadok, 2005; Carruthers, 2002b; Ingram et al., 2009) suggests that implementation success may be significantly more complex in planning environments where discretion may permit municipalities to circumvent regional plans or even their own plans and policies if there is insufficient local political support. This research similarly found that local plan quality was infrequently reported as a significant barrier to growth management. Few empirical studies have found a correlation between plan quality and implementation, despite an assumed relationship between the two (Padeiro, 2016; Steelman & Hess, 2009). Recent findings have determined that, regardless of quality, plans are more likely to be implemented when they reflect the views and interests of local communities (Ali, 2014; Lyles, Berke, & Smith, 2016) and are developed through a negotiated, public process (Steelman & Hess, 2009). Plan quality may simply be a reflection of planning agencies' existing motivations and interests, and those latter characteristics may ultimately be more influential on implementation than the plan itself. Berke and colleagues (2013), for example, found that the strength of local plans to protect a common pool resource, was greater for local municipalities that benefited the least by exploitation of those resources.

Chapter 7. Institutionalized Barriers to Growth Management Planning Approaches in the Greater Golden Horseshoe

Comparisons of the barrier models for each case study (in Figures 7, 8, and 9) demonstrate unique regional patterns of key barriers and interactions that vary from the generic model based on the literature (Figure 4). Interactions between the three levels of planning culture and local social, economic and environmental contexts were found to create regionally-unique framing institutions that helped to explain this variation. The interface between local context and the planning environment, in particular, played a significant role in the configuration of local patterns, by defining the specific growth and development pressures, the types and magnitude of planning challenges facing implementing agencies, and the prevailing interpretations, belief systems and motivations of implementing actors. This chapter examines the variability in barriers across the case studies and their interrelationships that create and sustain unique local responses to growth management. Variation across case studies is explored within the three broad institutions that frame the interrelationships between barriers and local context. The findings are then discussed within the context of the merged historical and sociological institutional framework and planning culture literature, including an examination of the mechanisms by which barriers are reproduced or challenged to create opportunities for transformative change. These discussions are used to reveal answers to the questions How do barriers interact to reinforce the status quo? and Where are there opportunities for change?

Key Themes across Case Study Regions

The themes described in this chapter explore how the practice of planning is embedded within a locally-specific institutional framework that is full of competing values and rationalities. Drawing from the case study results, the themes reveal how local context interacts with the each region's planning culture to define a unique institutional setting that guides local implementation of the Growth Plan. The themes demonstrate how each region's unique set of socio-political, economic and environmental conditions operate to magnify some barriers more than others, thereby creating the framing logics, incentives and constraints that influence how the Growth Plan is understood, communicated and implemented. Recognizing that institutions are not static but rather represent a set of factors that are continually challenged and scrutinized by internal and external actors, and local conditions, barriers to implementation in each region are further examined to reveal patterns of stability and opportunities for change.

The first theme pertains to the interplay between local context, place identity and urban governance. The two, predominantly rural, case study regions of Simcoe and Peterborough were found to share similar environmental and socio-political conditions that created a different set of pressures and constraints than those found in the Waterloo case study region. Influenced by similar local pressures, the rural regions of Simcoe and Peterborough shared similar planning environments in which a particular set of preferences about land use planning matters permeated actors' perceptions of and responses to obstacles to growth management.

The second theme relates to the relationships between local context, land and property markets and urban governance. Distinct land and property market pressures across case studies, in combination with market ideologies and beliefs at the planning environment scale were found to justify and reinforce certain types of planning responses to manage growth. Under this theme, framing institutions were again found to split across an urban and rural/peri-urban divide.

Planning in Rural Regions: the Role of Place Identity and Urban Governance

As an artifact of the planning process, the predominantly rural, exurban and peri-urban built forms of Simcoe and Peterborough case study areas were found to be a principal barrier to growth management in these regions. Exurban and peri-urban areas have been defined as "the area between existing cities and the rural hinterland that is seeing land-use changes associated with proximity to the city, primarily conversion from rural to urban uses" (Sorensen, 2016, p. 134). Settlements within these areas have been identified as comprising areas of "very-low density, amenity-seeking, post-productivist residential settlement in rural areas" (L. Taylor, 2011, 324) but in the case studies examined for this research also included more traditional, agriculture-based rural settlements. These were sites of significant conflict and contradiction with respect to managing growth, particularly where culturally-supported and familiar low density urban forms interacted directly with societal scale barriers such as consumer preferences, NIMBY and auto dependency to reinforce and defend the status quo. Collectively these barriers created a strong institutional framework defined by the logics of place identity, that when combined with local contextual factors such as rapid in-migration for Simcoe, and slow economic growth for Peterborough, created significant pressures for small, amenity-rich communities to permit low density residential, and recreation-related or seasonal (second home) developments for which the Growth Plan offered little guidance.

In Simcoe, consumer demand and development pressure for recreational and peri-urban residential development in combination with limited local planning capacity created fragmented development patterns and regional scale planning challenges for water and waste water servicing and transportation (Birnbaum et al., 2004). In Peterborough, as evidenced by the Fraserville proposal, the

combination of recreation-related development pressures and slow economic growth elevated the importance of economic development in local decision making at the expense of growth management. The absence of identified boundaries for small settlement areas in rural municipalities within Peterborough and Simcoe Counties further enabled both regions to permit low density developments in areas without municipal services, while still meeting Growth Plan targets (Neptis Foundation, 2017). In both Simcoe and Peterborough, insufficient local and Provincial policy guidance for amenity-related development, political growth ambitions and development pressures combined to create a reactive planning environment in which private interests dominated discourses about future growth (Birnbaum et al., 2004).

At the planning environment scale, the anti-urban sentiments of municipal implementing agencies in Simcoe and Peterborough interacted with the perception of growth as an economic imperative to create a unique and sometimes conflicting set of planning approaches, motivations, norms and behaviours that favoured growth, but only in its lowest density form. Key political actors within county and rural, lower tier municipalities frequently self-identified with a small town built form, characterized by a predominance of low density residential housing, agricultural lands and natural amenities, while viewing restrictions on growth (through Provincial population allocations) as a threat to local prosperity and self-determination. Political will to support and achieve Growth Plan targets and policy objectives in Peterborough and Simcoe was found to be influenced by strong, anti-urban beliefs, a preference for local decision making, and a distrust of Provincial planning agencies and mandates.

In Simcoe, and to a lesser degree in Peterborough, these sentiments were shared by staff who challenged the appropriateness of the Growth Plan policies for their communities. Compared with the Waterloo case study region, planning staff in the rural and exurban municipalities of Simcoe and Peterborough were decidedly less optimistic about meeting the targets of the Growth Plan, and many questioned its appropriateness for their communities. County and lower tier municipal planners in Simcoe and Peterborough identified maintenance of a rural or small town character as a desirable planning objective and a high priority for local politicians. Planners often equated built forms typically associated with urban areas (e.g. high rise development) with a loss of identity and sense of community. Intensification and greenfield targets required by the Growth Plan were perceived by planners as a challenge to the maintenance of small town character, even for marginal increases in density.

Frequently associated with peri-urban communities in Simcoe and Peterborough was a planning environment that favoured local decision making and opposed the transfer of decision making power from local communities to the Province. While many actors in urban municipalities such as the cities of Kitchener, Waterloo, Barrie and Peterborough, identified positive outcomes as a result of renewed

Provincial involvement in local planning matters and a stronger Provincial framework to reinforce local planning decisions, planners and politicians in the lower tier, rural municipalities of Simcoe and Peterborough expressed frustration and resentment with Provincial involvement in local land use planning issues. Belief in the value of local decision making was conflated with anti-urban sentiments, as revealed through such phrases as "Toronto-centred vision", 'big-city-centric", "Toronto-focused" and "big brother in Toronto", to describe the Growth Plan and the Province's involvement in local planning issues. Political leaders within Simcoe and Peterborough's rural and peri-urban regions questioned whose interests were being served by the Growth Plan and adopted a localist, "us-vs-them" rhetoric. Such beliefs helped to support the narrative that dominated the discourse in peri-urban and rural areas that the Growth Plan was incompatible with the culture and built form of smaller communities and that its implementation threatened local autonomy. Simcoe's culture of localism, in particular, was found to reinforce the existing county-city governance system, hinder horizontal consistency between the 19 lower and single tier municipalities and the County, and stifle opportunities for improving coordination of growth management planning (Berkeley Consulting Group Ltd., 2010; County of Simcoe Governance Committee, 2012). In contrast to Simcoe and Peterborough, Waterloo municipal actors typically shared a more regional perspective on growth management issues and demonstrated greater coordination and horizontal and vertical consistency through a regional governance system.

Rural identity in Simcoe and Peterborough interacted with local aspirations for economic growth to create unexpected outcomes that obstructed implementation of the Growth Plan. Political support for development and growth, while safeguarding small town character, helped to reinforce continued development of low density urban forms. Planners and politicians within the more rural or peri-urban regions of this study frequently perceived growth management as a threat to local economic development and sought opportunities to encourage amenity development while maintaining the lower densities favoured by local residents. The values of preserving small town character and promoting economic growth, for example, were the basis upon which Simcoe planners and politicians justified requests to the Province for alternative greenfield density and intensification targets, the allocation of additional population and expanded settlement areas (e.g. employment lands along Highway 400). These same values influenced Cavan Monaghan's (in Peterborough County) original support for the controversial Fraserville development. The competing discourses of pro-growth, and anti-urbanism were reflected in the planning policies of smaller municipalities, many of which sought to reduce intensification targets and continued to plan for predominantly single detached residential urban forms with limited provision for moderately higher density urban forms such as multiple unit dwellings. A preference for low density growth created an incentive for both Simcoe and Peterborough municipalities to take advantage of a

policy gap in the Growth Plan that permitted them to direct low density growth to undelineated built up areas without full municipal servicing (Neptis Foundation, 2017).

Growth management in the more rural municipalities was further challenged by consumer demand for low density urban forms, second home and recreational development and NIMBY responses. The influence of these societal scale barriers was heightened by local conditions, such as relatively low property values (in comparison to the Greater Toronto Area) and the abundance of natural amenities. Existing residents were described by planners and in the media as exerting significant political pressure to block taller and/or denser urban forms that were perceived as incompatible with the existing built form. In some communities, the perception of incompatible development coincided with gaps in socio-economic status between existing residents of estate lot developments and newcomers seeking homes in more compact subdivisions. Simultaneously, demand from new, rural and natural environment amenity seekers (particularly in Simcoe) created additional development pressure for continued low density residential and recreational development. The pressures from both existing and new amenity seekers helped to further reinforce planning decisions that favoured continued emphasis on low density development forms as the predominant urban form, "compatible" low density forms for new development in close proximity to existing low density neighbourhoods, and the separation of existing low density from higher density development. In Waterloo, despite a recognition of community pressure against infill and intensification, municipal planners and political actors were found to be less responsive to these pressures and demonstrated a high level of support for growth management objectives.

The role of rurality as an obstruction to growth management implementation has received limited attention in the planning literature, although studies of rural planning practice have, for some time, identified rural areas as contested and complex spaces in which traditional urban planning policies and practices tend to fail (Cloke & Hanrahan, 1984; Cloke & Little, 1987; K. I. Frank & Reiss, 2014; Qviström, 2012; Qviström & Cadieux, 2012). In a review of the literature on rural planning practice, for example, Frank and Reiss (2014, p. 393) noted that "researchers have consistently found that, despite all the laws, policies, and programs for planning, rural planning in practice is adhoc, incremental, and disproportionately dictated by private sector decision making and higher level government policies...". The authors further note that planning research has traditionally viewed rural areas as "downscaled cities" or "cities in waiting", neither of which recognize, in any comprehensive way, the unique contextual and institutional challenges facing rural areas (K. I. Frank & Reiss, 2014, p. 386).

Spatially differentiated patterns of urban property have been identified in the historical institutionalism literature as an important factor that influences governance and infrastructure systems by structuring demand, regulation, and investment in property, and these systems in turn help to perpetuate

existing patterns of land use (Sorensen, 2018). Studies of rural issues in North America and Europe have confirmed that rural communities receive significant economic benefit from the exploitation of natural and "countryside" amenities through recreation and second home development, and may rely on amenity migration as a primary source of economic development (Golding, 2012; C. M. Hall, 2015; Velvin, Kvikstad, Drag, & Krogh, 2013; Woods, 2011). In part because of their natural amenities, peri-urban and rural areas have been found to be sites of significant in-migration, typically in the form of scattered or low density development (Adamiak, 2016; Chipeniuk, 2004; Cuadrado-Ciuraneta, Durà-Guimerà, & Salvati, 2016; Golding, 2012; C. M. Hall, 2015; Kondo, Rivera, & Rullman Jr., 2012; Murdoch & Lowe, 2003). Taylor (2011) found that amenity migration challenges growth management policy because it typically occurs outside of urban areas, in municipalities with less organized governance. In a study of two periurban Ontario towns, Gilbert et al (2005) found that economic development dominated local growth discourses and that development occurred at the expense of conservation objectives, despite a powerful citizen lobby that favoured the conservation of farmland and natural areas. In slow growth regions, the influence of economic development in local decision making is intensified, with local planning environments susceptible to decision making that favours growth at any cost (Leo, 2006; Leo, 2008). Limited planning capacity and a shared perception that growth management policies do not address important rural issues in any meaningful way further challenge rural community buy-in and adoption of growth management policy (M. M. Edwards & Haines, 2007).

A broader sociological institutionalist view of the physical form of rural regions suggests that rural land use patterns may create and help perpetuate particular cultural beliefs around appropriate urban forms and types of economic development. For example, the concept of rural identity and sense of place has received some attention in the scholarly literature, although not often in the context of growth management implementation. The motivations, meanings and values that key actors associate with rural and peri-urban places have been found by scholars of rural planning practice to contribute to planning challenges at the local planning level (Golding, 2012; Halfacree, 2012; Kondo et al., 2012). These studies have found that place identity played an important role in shaping local actions because it, served as "the interpretive frame through which people there measure their lives, evaluate others, take political positions, and just make sense" (Gieryn, 2000, p. 467). Studies of rural and peri-urban communities suggest that preferences for low density urban forms may be more keenly felt and strongly promoted in rural municipalities than their urban counterparts. Rural and peri-urban areas have been found to be subject of a "preservation paradox", in which amenity migrants seek residential opportunities in non-urban areas of the countryside, and, once there, take action to protect the "rural idyll" from subsequent amenity migrants (Cadieux, 2011; Murdoch & Lowe, 2003; Qviström & Cadieux, 2012). Such migrants will actively support planning policies and regulations that maintain the rural aesthetic or small town character (Kondo

et al., 2012), as well as protect natural areas, private property values and rights, and a socially exclusive landscape (Gilbert et al., 2005; Golding, 2012). Differentiated identities along urban and rural lines help fuel an "us-vs-them" rhetoric (Golding, 2012).

The case studies examined in this research demonstrate that interactions between local context, place identity and urban governance impact how shared societal scale barriers are interpreted and acted upon by actors at the planning environment scale. In rural regions, the magnification of certain barriers within these institutional frameworks created a unique planning environment in which the competing values of sense of place, local autonomy and economic growth trumped growth management considerations. These findings are consistent with those of Frank (2017, p. 304) who summarized these competing interests and governance challenges of rural communities as: "...on one hand there is a reported need for coordinated and mutually supportive policy directions from the top, from the central government; and on the other hand there is a desire for flexibility, situation specific strategies, and local control. The latter is problematic because the limited resources and anti-urban bias of rural areas make it difficult to conduct any planning efforts beyond the minimums required by the central government."

Planners as Market Actors: Land and Property Markets and Urban Governance

Common to all case study regions was the identification of land and property market constraints as a barrier to local growth management, particularly with respect to preferences by consumers and the development industry for low density built forms. While the identification of market constraints was shared across case study regions, two distinct perspectives of the market emerged that defined key actors' interpretation and responses to those constraints.

In the Waterloo case study region, a unique planning environment served to support a wide range of planning tools and approaches (artifacts) to respond to market constraints. Waterloo planners and politicians were found to play an active role in addressing market barriers including responding to market demand side challenges through the adoption of a higher order public transit system to encourage and support denser urban forms. Market supply side challenges were addressed through the establishment of an urban growth boundary, adopting higher density and intensification targets than required by the Growth Plan, awareness-building with developers, and developing financial incentives for downtown and brownfield redevelopment. These approaches functioned to constrain the supply of development opportunities at the urban periphery while stimulating development opportunities within built up areas. Community support for growth management policies was secured in part by appealing to the public and lower tier municipalities' values of economic prosperity and cultural vibrancy, and presenting intensification as a necessary approach to achieve those values. Waterloo area planners described practices to improve the quality and appeal of higher density urban forms and expressed high expectations

for developers to innovate and provide alternatives to single detached residential developments. The historical shortage of well-designed, high density developments was not perceived by Waterloo planners as an inevitable market outcome, but rather the result of earlier, lax municipal approval processes and urban design guidelines.

The strength of Waterloo's efforts to regulate and stimulate the land and property market system in favour of intensification was moderated by contradictions in Ontario's regulatory framework that failed to recognize the role of planning as a means to address market failures to achieve social and environmental goals. The Ontario Municipal Board's support for a land budgeting methodology that relied on past market trends constrained the Region's efforts to shape market conditions to achieve growth management objectives. In its decision, the Board demonstrated an interpretation of planning as a tool to respond to existing markets rather than as a driving force to help shape markets. Still, despite a moderate expansion of the urban growth boundary as a consequence of a settlement with a consortium of private landowners, Waterloo Region's planning efforts to redirect growth to already built up areas were largely successful in establishing an assertive and coordinated framework to meet the Growth Plan targets.

By contrast, the planning environments in the rural municipalities within Simcoe and Peterborough Counties were found to be less supportive of interventions to address market barriers to growth management. County and lower tier municipal politicians in these regions regularly expressed concerns that Provincial Growth Plan objectives conflicted with local economic development needs and aspirations. Planners similarly expressed concerns that the Province's allocation of growth to certain communities failed to recognize consumer demand as a key driving force in settlement patterns. Growth Plan population projections were viewed by many rural municipal actors as "choking off" much needed population growth to small, rural communities. In the context of a slow growth local economy, planners in the Peterborough case study region identified strong political pressures that undermined support for any actions that may slow or inhibit growth. Constraining growth in smaller rural communities in this region was perceived as a threat to a municipality's ability to "balance its books". Absent from the discourse around growth-as-an-economic-imperative was the acknowledgement of low density development as a possible contributing factor in perpetuating the need for additional growth to generate property tax revenues that would help fund maintenance of infrastructure from previously-approved, low density developments.

In addition to concerns about the impacts of regional growth management on local economic development, actors within the rural municipalities of Simcoe and Peterborough expressed a view of planning as dependent on land and property markets. Describing low density housing as a defining feature

of their communities, planners in these communities were decidedly pessimistic about the capacity of planning to shape consumer demand and effect change. Some planners expressed a sense of futility that planning could shape urban form in the face of strong market pressures for low density development, citing "that's not why people move here", and "developers are not going to build housing forms that people aren't going to take". Others expressed a normative view that the role of planning was not to shape land and property markets but rather to respond to those markets. Such views coincided with a lack of support for the Province's population growth allocations that directed, rather than responded to, growth and development. Actions by local planning environments to shape market conditions were constrained by the view that planning was a market-led, rather than policy-led endeavor, as evidenced by one Simcoe planner's comment: "...I don't think the town initiates or has smart growth initiatives. I think we review development and try to apply smart growth principles".

The circumstances surrounding the development industry's challenge to Waterloo's policy framework helps demonstrate the underlying, less visible barriers that municipalities face in balancing public and private sector interests and the achievement of growth management goals. Scholars of planning practice have noted that "planners do not build cities and towns. Rather, they are built by private sector interests, developers in particular" (Coiacetto, 2000, p. 353). The role of planners to achieve public goals within this framework has been a matter of debate, with an emerging literature emphasizing the responsibility of planners to influence private sector interests – not just through the adoption of planning policy and regulation, but also through direct intervention in market conditions within which the property and development industry operates (Adams & Tiesdell, 2010; Coiacetto, 2000; Heurkens et al., 2015). Studies of the influence of land and property markets on planning have long theorized that these markets do not operate with perfect economic rationality and are in fact highly influenced by the institutional and geographic contexts in which they are embedded (Alexander, 2014; Charney, 2015; Coiacetto, 2000; Guy & Henneberry, 2000; Healey & Barrett, 1990). Development industry actors, constrained by land markets, are motivated to influence the institutional setting (e.g. regulations and consumer preferences) within which they operate to achieve financial interests. Planners are likewise capable of the same to achieve public goals, but may have differing motivations, levels of influence and power that impact their abilities to steer or guide the development industry toward actions that are supportive of growth management objectives. When disparities exist between the goals of planning agencies and developers, planners are more likely to achieve desired outcomes if they can manipulate existing property markets to create the necessary conditions that support their goals (Charney, 2015; Jones, 2014). Comparisons of different planning and development regimes in Europe and the US have found that planning cultures that support reactive, market-led development approaches tend to have less influence on the nature of that development and a tendency toward urban sprawl (Halleux, Marcinczak, & van der Krabben, 2012).

Consistent with the results of this research, rural and exurban municipalities in other regions have been found to support market-led planning approaches (Aarsaether & Ringholm, 2011; K. I. Frank & Reiss, 2014; Heurkens et al., 2015). Historical institutionalists have identified historical differences between the political and economic aspirations of urban and rural municipalities as playing a defining role in the management of urban growth (Ghitter and Smart, 2009). Rural and exurban areas have been characterized by scholars as focused on economic development as a primary objective, driven by a "scarcity mentality", challenges associated with declining traditional economies, rural poverty and a lack of services (K. I. Frank & Reiss, 2014). Municipal actors in rural and exurban communities face strong incentives to enable amenity-related development where amenity migration forms a significant component of that community's population and economic growth. Amenity migration has been described as the gentrification of rural landscapes, bringing with it wealth and economic diversification to rural communities while increasing local support for traditional built forms (Bourne et al., 2003). Within these contexts, planning often plays a subordinate role in guiding or informing economic development, and is often viewed as not relevant to local needs and aspirations.

The ability of municipalities to manage competing interests, including economic interests, to achieve broader planning goals has been found in other studies to be moderated by its planning capacity (Göçmen & LaGro, 2016; Hawkins, 2014). With planning capacity commensurate with population size, and a tax base that is insufficient to fund municipal water and wastewater services, small municipalities in the case studies examined for this research were in a compromised position to balance municipal economic growth objectives and developers' economic interests with broader public interests. Combined with a view of planning as detached from the market and the absence of political support for growth management principles, planning staff in smaller communities lacked the resources and political support to circumvent the status quo. Rural planning capacity challenges have similarly been found by Frank and Hibbard (2017) to hinder rural municipalities' ability to conduct proactive, long term planning that to go beyond minimum policy requirements.

Studies within other contexts outside of North America have also demonstrated that interactions between urban governance and land and property markets play a critical role the creation and maintenance of low density, uncoordinated peri-urban development, although the institutional characteristics may not be the same as those typical of the North American experience (de Vries, 2015; Othengrafen, 2010; Sorensen, 2016). For example, in a study of Japan's peri-urban spaces, Sorensen (2016) found that the existing scattered, uncoordinated development forms characteristic of these areas was closely tied to an institutional system characterized by highly fragmented landownership, powerful, small-scale landowners who relied on land subdivision as a source of income, and a weak local

governments with limited severance and development control. These factors reinforced the long standing concentration of wealth and power in the hands of farm families whose selling of small parcels of land went unchallenged by weak municipal governments with limited resources and legal planning authority.

Patterns of Stability and Change

Scholars have described institutions as stable by design or through the implementation of informal and often unconscious mechanisms that encourage their reproduction. An institution can change if the formal and informal stabilizing mechanisms are undermined, removed or replaced with a credible alternative. While the characteristics of institutions can play a significant role in determining the institutional stability, strategic or reflexive action of actor groups and individuals is also theorized to play a role (Mahoney & Thelen, 2009; Streeck & Thelen, 2005). The internal consistency of institutions can be challenged by external conditions or by actors operating within the institution framework (Lowndes & Roberts, 2013). This section explores patterns of institutional stability and change in the three case study regions by examining the visible and invisible mechanisms supporting and undermining barriers to the Growth Plan. Using the analytical tools and mechanisms theorized in the historical and sociological institutionalism literature and planning culture to promote reproduction and change (Chapter 3, Tables 2 and 3), local context and regional planning cultures are examined to identify relationships that help subvert or conform to existing institutional expectations, conventions and logics.

At the Tipping Point: Growth Management in Waterloo

As theorized by the historical institutionalism literature, the institutions enabling and constraining local implementation in each of the three case studies demonstrated a range of internal inconsistencies and mismatches with external conditions that both reinforced conventional approaches to planning and presented opportunities for change. In the Waterloo region, institutional inconsistencies resulted in patterns of both stability and change through a variety of competing mechanisms (Table 19). Mechanisms promoting entrenchment of the status quo within the land and property market institution included a planning environment in which the local development industry actively resisted Regional planning efforts to establish an Urban Growth Boundary by challenging the basis upon which the boundary was developed.

The Urban Growth Boundary presented challenges to local developers' efforts to avoid the risks and complexity associated with a less familiar infill development process, and reduced or delayed potential economic benefits for owners of greenfield properties outside of the boundary. Developers, as reluctant 'rule takers' contested the Region's growth management objectives by initiating a quasi-judicial review of the Regional plan. These actions demonstrated that development industry actors were not

wholly constrained by the new rules of practice established by the urban governance institution within which they operated. Since OMB appeals must be based on legitimate planning grounds, the appellants framed their appeal of the Region's Official Plan by drawing on established conventions and rules of the land and property market institutions to legitimize traditional land budgeting approaches and rationalize the need for an expansion of the urban boundary. The development industry's expert-based framing of the issue presented the Region's land budgeting methodology as a threat to housing choice and quality of life and called into question the credibility of the Region's proposed alternative. These arguments were successful in securing the support of the OMB adjudicator, who questioned the legitimacy and credibility of the Region's land budgeting methodology that placed a higher value on achieving Growth Plan's objectives than on consumer choice. The conflict demonstrated conflicting objectives for planning between local planning agencies and the development industry, and ultimately a gap in planning ideologies and methods between the urban governance institution compared and the land and property market. As well, it highlighted internal inconsistencies in the Provincial regulatory framework that enabled powerful actor groups to defend the status quo by reaffirming the legitimacy of the market-led planning practices.

For those developers who did seek infill development opportunities, their efforts were challenged in some municipalities by outdated municipal engineering and planning standards (e.g. low density zoning in areas marked for intensification, and restrictive parking standards) that continued to be perceived by municipal authorities as efficient and meeting performance expectations. In these cases, the ability of developers to create viable infill developments was hindered by some municipalities' delayed adoption of intensification-supportive regulations. While likely a temporary challenge to implementation caused by the slow adoption of new rules to support broader Official Plan policies, this delay created an obstacle to conformance at a time when the feasibility and credibility of compact and infill development were being tested.

Consistent with the other study areas, consumer preferences for car-oriented, low density development in Waterloo was found to have widespread cultural support and enjoyed the benefits of familiarity and advocacy for its protection. The relatively low density and uniquely multimodal nature of the study area narrowed options for transit-oriented development, and presented 'sunk' costs that required significant investment to alter. Planning efforts to adopt policies that re-envisioned the existing urban form conflicted with past conventions and expectations that defined what was considered appropriate development.

Despite stabilizing mechanisms that supported the existing land and property market and place identity institutions, Waterloo also demonstrated an evolving governance institution that helped place

destabilizing pressures on those same institutions. Many of Waterloo's municipal and Regional planners and politicians actively challenged the efficiency, legitimacy and credibility of institutionalized societal barriers to growth management such as consumer preferences, auto dependency and NIMBY. Through the adoption of assertive growth management policies in the Regional Official Plan, Regional planners and politicians created formal sanctions to legitimize alternative development patterns. Moreover, through awareness building and legitimizing new planning approaches, local planners changed the discourse around growth management as one of economic opportunity and environmental responsibility. Regional and municipal planners transmitted new ideas that questioned the efficiency and legitimacy of conventional low density development, and worked to improve awareness and credibility of alternatives through education and dialog with developers, adoption of policies to support compact growth, and investment in public transit. Regional planners attempted to address cultural barriers by fostering legitimacy and credibility of the transit system and higher density, transit-oriented development by framing the changes as a necessary means to attract economic development. This framing of growth management resonated with local economic objectives and environmental values and helped build an argument for the need for reform. An important factor unique to the Waterloo case study was the concentration of broad policy and planning powers in the hands of a regional planning authority, which established region-wide rules for a coordinated approach to managing growth. The Region used its veto power to establish a progressive growth management policy framework and transit infrastructure that imposed new planning rules on lower tier municipalities, developers and other stakeholders and improved the viability of compact development.

Table 19. Growth Management Barriers in Waterloo - Patterns of Institutional Reproduction and Change.

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
Development industry not committed to growth management objectives	Efficiency: Perception that low density development provides greater economic return Familiarity: Status quo understandable lower risk Self Interests: Industry benefits from and advocates for reduced regulation	Incentives/Sanctions: Region and local municipalities adopt strong policy framework that implements growth management planning objectives using provincial law as a foundation
Preference for low density suburban form	Legitimacy: Low density forms culturally supported Familiarity: Low density forms are recognizable and understandable Self Interests: advocacy for status quo by development industry and property owners	Ideas: Municipal actors recognize and promote new markets that favour higher density, centralized housing and encourage development of credible alternatives through higher quality design

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
OMB rulings inconsistent with Growth Plan objectives	Legitimacy: market-led planning over growth management planning legally supported	
	Absence of credible alternatives: Alternative land budgeting methodology discredited	
	Institutional complementarity: OMB reinforces conventional, market-led planning approaches preferred by development industry	
	Veto power: OMB overrules land budgeting approach that directs rather than responds to market conditions	
Presence of strong NIMBY lobbying against infill and intensification	Legitimacy: high density forms considered incompatible/inappropriate Familiarity: Low density forms recognizable and understandable Self Interests: advocacy against infill by	Discretion – Municipal actors use discretion to uphold growth management objectives in the face of public opposition
	property owners	
Auto dependency and absence of alternative travel options	Legitimacy: car travel culturally supported	Ideas: transmission of new ideas by Region and advocacy coalitions
	Familiarity: car travel routine, taken-for- granted Self Interests: advocacy by public for continued investment in car infrastructure	Credible alternatives: Significant Regional investment in and education for public transit
	Transaction costs: Sunk costs associated car-oriented transportation infrastructure	
Insufficient experience or knowledge to build alternatives	Familiarity: Greenfield development routine and low risk to developers	Ideas: Municipal actors play an active role in addressing market barriers and awareness-building with developers.
Unique physical conditions challenge intensification	Transaction costs: Sunk costs associated with low density, multimodal urban form	Veto power: Significant Regional investment, despite public controversy, in supportive infrastructure (e.g. public transit)
Unsupportive engineering and planning standards/policies	Efficiency: Perception by some that existing engineering and planning constraints meet performance standards	Ideas: Municipal actors challenge efficiency of status quo, credible alternatives emerge from advocacy groups

Market-led Planning in Simcoe

Barriers to growth management in the Simcoe case study region exhibited a high level of institutional reproduction within all three institutions, and little evidence of change as a result of a number of stabilizing mechanisms stemming mainly from the planning environment (Table 20). The Simcoe case study revealed a significant gap between the ideologies, rules and approaches of formal planning

institutions at the Provincial scale, and those of the local urban governance and market institutions. Rules and approaches for managing urban growth within the Provincial Growth Plan were inconsistent with Simcoe planners' views of planning as a market-led endeavour, the reduced planning capacities of smaller Simcoe municipalities and an economy dependent on low density, amenity growth. This absence of fit between the broader planning regulations and the local urban governance and market institutions stemmed in part from what has been described as a conflict between political vs. bureaucratic rationalities to planning, where political rationality refers to a belief in the supremacy of local political preferences and economic interests of planning, and bureaucratic rationality refers to planning approaches that support a "long-term perspective, ample room for expertise, the use of plans and reports and steering through regulations" (de Vries, 2015, p.2161).

The gap between Province's growth management planning mandate and the local urban governance institution was further reinforced by entrenched beliefs in local decision making by County and municipal planners and politicians and a county/city governance system. In this way, formal governance organizations and informal planning practices, rules and norms where supported by cultural understandings about the appropriate scale of decision making. These served to undermine the legitimacy of the Province's new planning framework and efforts to promote greater regional coordination of urban growth and planning. A perception that local decision making was the most efficient means to serve municipalities' economic interests also undermined any action in favour of coordinated planning approaches. Insufficient planning capacity and the absence of regional coordination reinforced municipal planners' and politicians' support for familiar and low short term risk planning approaches that favoured low density development patterns.

Widespread cultural support for rural and low density built forms shared by consumers, planners and politicians helped to legitimize municipal actions to plan for and protect Simcoe's low density built forms. Traditional planning approaches for low density, car-oriented built forms served the interests of key stakeholders, including the economic interests of developers and the preferences of new consumers and existing residents who exerted significant pressures on local governments to permit growth outside of built boundaries (in the case of development industry) and to favour low density urban forms (in the case of new consumers and existing residents).

Where discrepancies exist between or within institutions, actors are theorized to play a key role in enabling or blocking change (Mahoney & Thelan, 2009). Simcoe actors used their power and discretion to block local change by bringing the rules governing local planning more in line with local cultural norms, conventions and expectations. Advocacy by municipal politicians for Growth Plan policies that reflected local interests resulted in an amendment to the Growth Plan that compromised the Plan's

objectives, including an increase in the number of areas identified for growth, and a reduction in Simcoe's intensification and density targets. In situations where local political actors and municipal planners were not wholly constrained by the new planning legislation or where policy gaps existed, they exercised their power and discretion to re-interpret and resist imposed density and intensification targets by approving development applications in areas within undelineated built boundaries. Provincial veto powers, while exercised through Official Plan approvals and the development of a specific Growth Plan for the Simcoe region, have proven to be ineffective for dealing with small scale, incremental transgressions from Growth Plan objectives.

Simcoe actors' and actor groups' attachment to place and rural identities were found to comprise an important "cultural category" – or group with shared identity and ideologies (Cappoccia 2016). For such groups, new rules and ideational frameworks require reframing in such a way as to resonate with its members. In absence of any reframing of existing understandings and meanings around natural and rural amenities and urban growth, Simcoe municipalities were unable to rationalize or justify the need for changes to existing planning practices. Combined with strong cultural support for low density urban forms, and amenity based growth within the governance, place identity and market institutional frameworks, actors and actors groups (e.g. planners and politicians) were largely unable to perceive threats to local amenities caused by unrestricted, low density urban growth, or opportunities to achieve dual objectives of economic growth and compact development.

With a few exceptions, such as a burgeoning culture of growth management planning in Barrie, new ideas, incentives and sanctions to undermine or challenge existing institutionalized barriers to growth management were largely absent in the Simcoe case study region. In contrast to Waterloo, where new ideas and credible alternatives were promoted by key municipal planners, politicians and advocacy coalitions, Simcoe's planning environment demonstrated a relatively unified culture that favoured existing institutions. Mechanisms for change were found to emerge exclusively from outside of the local planning environment. These included the Province's non-decision regarding the County's Official Plan, and its adoption of an Amendment to the Growth Plan, which mandated specific growth management objectives in the Simcoe area. The strength of the Amendment to achieve growth management objectives was diminished as a result of successful advocacy by the development industry and local municipalities.

 ${\bf Table~20.~Growth~Management~Barriers~in~Simcoe-Patterns~of~Institutional~Reproduction~and~Change.}$

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
Official Plan does not conform to Growth Plan	Legitimacy: "made in Simcoe" plan perceived as more appropriate	Veto Power: Province does not approve OP
Incompatible provincial decision making, policy and investment	Legitimacy: Growth Plan's Amendment 1 sanctions some development outside of built up areas and lower density growth for Simcoe	
Lack of political will	Efficiency: local planning perceived as meeting performance expectations	
	Legitimacy: high density forms considered incompatible/ inappropriate	
	Self Interests: advocacy against infill by property owners	
	Discretion: politicians use discretion to support developments that don't adhere to growth management principles	
Lack of staff commitment to growth management objectives	Efficiency: market-led planning perceived to meet economic needs and performance expectations	
	Legitimacy: compact forms considered inappropriate for rural areas Familiarity: Low density forms	
	recognizable and understandable	
Staff view high density development as incompatible to local character	Legitimacy: compact forms considered inappropriate for rural areas	
	Familiarity: Low density forms recognizable and understandable	
Insufficient planning capacity	Absence of credible or available alternatives: Municipal revenues insufficient to support enhanced planning capacity	
Inefficient or inconsistent administration	Discretion: Staff adapt Growth Plan objectives to suit local context	
Poor coordination and level of engagement between local and upper tier government agencies	Efficiency: local planning perceived as meeting performance expectations	
	Legitimacy: localism culturally and morally supported as more democratic means of decision making	

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
Weak or absent regional coordination of local planning	Efficiency: local planning perceived as meeting performance expectations	
	Legitimacy: localism culturally and morally supported as more democratic means of decision making	
	Discretion and Veto Power: County has limited control over local decision making	
Inter-municipal competition for development	Legitimacy: competition for development supports perception that growing cities are successful cities	
	Efficiency: Competition for development provides local economic benefits (e.g. new property tax revenues, development charges and services)	
Rejection of Provincial oversight	Legitimacy: localism culturally and morally supported as more democratic means of decision making	Incentive/Sanctions: Amendment 1 adopted to regulate local planning
Preference for low density suburban form	Legitimacy: Low density forms culturally supported	
	Familiarity: Low density forms recognizable and understandable	
	Self Interests: advocacy for status quo by development industry and property owners	
Auto dependency and absence of alternative travel options	Legitimacy: car travel culturally supported	
	Familiarity: car travel routine, taken-for-granted	
	Self Interests: advocacy by public for continued investment in car infrastructure	
	Transaction costs: Sunk costs associated car-oriented transportation infrastructure	
Amenity migration and associated physical, social and economic characteristics	Efficiency: Amenity based development has local economic benefits	
	Transaction costs: Sunk costs associated with low density urban form	

Managing No-growth in Peterborough

Barriers to growth management in the Peterborough case study demonstrated a high level of stability and few mechanisms for change (Table 21). Like Simcoe, case study results for Peterborough revealed a gap between the province's growth management mandate and local urban governance institutions defined by a rural or non-urban cultural identity and aspirations for economic growth.

Planners and politicians of Peterborough County's rural municipalities revealed a cultural category defined in part by a preference for local decision making as the most efficient and legitimate means to serve their municipalities' immediate economic interests. A political preoccupation with economic growth further reinforced a political rationality to planning and limited restrictions on growth as the most efficient means to promote development and meet market demands. In the absence of efforts by Provincial, County or municipal actors to reframe intensification as an economic opportunity rather than an obstacle, the gap in planning ideologies and approaches between the Province and local municipalities created irreconcilable differences that encouraged local actors to block, circumvent or feign support for change.

Political advocacy for Growth Plan policies to reflect preferred built forms resulted in a reduction of intensification targets for Peterborough that provided a regulatory sanction for lower density urban forms. Low density urban forms and recreation and resource based development in many of Peterborough County's townships was further legitimized by the Growth Plan's failure to provide a sufficient regulatory framework to guide development in these areas, such as lower tier municipal intensification targets, density and intensification policies for undelineated built up areas, and resource based development policies. An absence of sufficient municipal revenues contributed to under-resourced planning departments leading municipalities to carry out reactive, market-led planning.

Like Simcoe, Peterborough's planning environment demonstrated a relatively unified culture that generally supported the institutionalized barriers to growth management. Peterborough planners described a sense of futility with respect to the introduction of growth management planning approaches given the political support for existing institutions that undermined the adoption and dissemination of new ideas, incentives or regulatory frameworks. Discretion in development review processes enabled staff and politicians to ensure new development proposals were adapted to conventional planning standards and cultural expectations. In contrast to Waterloo, where mechanisms for change emerged from the planners and politicians, and Simcoe where requirements for change emerged from the Province, Peterborough's community advocates were found to be the primary source of new ideas to challenge to conventional planning approaches. These ideas revolved around opposition to single developments and have had limited impact on the identification of credible alternatives to the region's broader planning approaches.

As with Simcoe, municipal actors in Peterborough demonstrated strong cultural support for rural and low density built forms. Cultural support for and familiarity with low density urban and rural built forms reinforced political support for municipal planning approaches that helped to perpetuate these ideals, while consumer advocacy for familiar urban forms challenged the legitimacy of alternative approaches such as rural infill and intensification efforts, which were viewed by planners as physically incompatible and politically unfeasible. Low density urban forms served the economic interests and preferences of developers who sought to build familiar and culturally-preferred urban forms and benefitted from a less restrictive planning framework. The absence of detectable impacts of low density, car-oriented development, such as traffic congestion, and the sunk costs associated with existing built forms and transportation infrastructure undermined the credibility of municipal efforts to adopt alternative planning approaches that favoured transit-oriented densities and complete communities.

Table 21. Growth Management Barriers in Peterborough - Patterns of Institutional Reproduction and Change.

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
Unsupportive engineering and planning standards/policies	Efficiency: Perception by some that existing engineering and planning constraints meet performance standards	
	Discretion and veto power: Local planning agencies hesitant to support new planning standards	
Incompatible provincial decision making, policy and investment	Legitimacy: Province sanctions reduced Growth Plan intensification targets for Peterborough	
High cost and complexity to retrofit existing low density built form	Transaction costs: Sunk costs associated with low density urban form	
	Efficiency: Minimal restrictions on development considered necessary for local economic growth; local planning perceived as meeting performance expectations	
Lack of political will	Legitimacy: high density forms considered incompatible/ inappropriate	Ideas: advocacy coalition challenges legitimacy of proposed
	Self Interests: advocacy against infill by property owners	Fraserville development
	Discretion and veto power: politicians use discretion in applying growth management principles to decisions	
Staff view high density development as incompatible to local character	Legitimacy: compact forms considered inappropriate for rural areas	
	Familiarity: Low density forms recognizable and understandable	
Insufficient planning capacity	Absence of credible or available alternatives: Municipal revenues	

BARRIER	MECHANISMS FOR REPRODUCTION	MECHANISMS FOR CHANGE
	insufficient to support enhanced planning capacity	
Inefficient or inconsistent administration	Discretion: Staff adapt Growth Plan objectives to suit local context	
Development industry not	Efficiency: Perception that low density development provides greater economic return	
committed to growth management objectives	Familiarity: Status quo understandable lower risk	
	Self Interests: Industry benefits from reduced regulation	
Presence of strong NIMBY lobbying against infill and intensification	Legitimacy: high density forms considered incompatible/inappropriate	
	Familiarity: Low density forms recognizable and understandable	
mensmeation	Self Interests: advocacy against infill by property owners	
Preference for low density suburban form	Legitimacy: Low density forms culturally supported	
	Familiarity: Low density forms recognizable and understandable	
	Self Interests: advocacy for status quo by development industry and property owners	
Auto dependency and absence of travel options	Legitimacy: car travel culturally supported, meet performance expectations, politically sanctioned	Ideas: advocacy coalition
	Familiarity: car travel routine, taken-for-granted	challenges legitimacy of proposed parkway expansion
	Transaction costs: Sunk costs associated car-oriented transportation infrastructure	
Unique physical conditions (e.g. slow growth and rural urban form) challenge intensification	Efficiency: Perception that any growth form of is necessary to provide economic benefits	

Local Context and Plan Implementation

At the outset, this research identified key barriers to growth management described in the plan and policy implementation literature and questioned whether these barriers would vary with local context. Case studies were examined within their different local contexts to evaluate if and how local factors influenced barriers to Growth Plan implementation at the artifact, planning and societal scales. Study results revealed that while different regions shared many similar barriers (particularly at the societal scale), the magnitude and expression of those barriers differed from region to region as a result of unique socio-political, economic and environmental conditions that characterized each place. These contextual

factors helped form distinct place identity, governance, and market institutional environments that created specific development pressures and influenced the beliefs, motivations and actions of local actors.

The presence of natural amenities in the rural and peri-urban areas of Simcoe and Peterborough regions combined with the regions' proximity to the Greater Toronto Area were found in this study to create significant seasonal and recreational development pressures. Small, less urban municipalities tended to share similar capacity challenges, amenity-related development pressures, a strong place identity, and a market-led approach to planning. In contrast, municipalities situated in large urban centres generally demonstrated a different set of barriers to growth management planning than municipalities in smaller, rural or exurban regions. In the Waterloo Region, a fairly strong local economy, a more urbanized built form and a long standing infusion of new ideas and resources from local post-secondary institutions helped structure a planning environment that was more receptive to Provincial growth management objectives. Waterloo's significant barriers were mostly found outside of the municipal government agencies, including an unsupportive development industry and inconsistent regulatory framework that upended regional efforts to contain low density, peripheral development.

This research found that interactions between local context and the planning environment scale was particularly important in determining how the Growth Plan was interpreted and implemented. Actors within the different planning environments, including planners, politicians, community stakeholders and developers, were found to possess particular institutional frames, unique to their specific social, political and economic conditions, which created the logics and rationale underlying many of the key barriers to growth management in each region. The frames provided the lens through which actors differentially interpreted societal values, assumptions and norms and negotiated locally-specific solutions through the planning process. In small, rural and peri-urban communities, the interactions between local context and the planning environment helped perpetuate a broader governance, land and property market and place identity institutional framework that supported conventional planning approaches and challenged a transition to new growth management approaches.

Development industry commitment to growth management objectives also appeared to vary with geography, and lack of industry support was reported with high frequency in the Waterloo case study as a barrier to growth management. While the literature has recently emphasized the spatial differences and non-uniformity within the property development industry (Adams & Tiesdell, 2010; Coiacetto, 2000; Henneberry & Parris, 2013), the geographic differences found in this research may be directly tied to differences in local policy and regulatory environments. Opposition to growth management policies by key development industry actors in Waterloo may have been a direct response to Waterloo Region's adoption of a new policy framework that significantly restricted suburban development opportunities and

associated economic returns for greenfield developers over the short term. A number of the appellants in the OMB hearing that challenged the Region of Waterloo's Urban Growth Boundary were development firms with projects throughout the Greater Golden Horseshoe Area, including the Simcoe and Peterborough areas. Had Simcoe or Peterborough Counties implemented similar assertive growth management policies, it is reasonable to assume that development industry opposition to growth management policies would have been more apparent in those regions.

The impact of geography was less apparent with respect to societal scale barriers such as consumer preferences, NIMBY and auto dependency on Growth Plan implementation. Planners in all case study regions, whether comprised of larger urban centres or peri-urban or rural municipalities, reported consumer demand for suburban, low density residential development as a driving force behind existing development patterns and the continued supply of low density urban forms. While consumer preference for single detached residential housing is widely understood to constitute a barrier to growth management (Ewing, Hamidi, & Nasar, 2015; Howley, 2009; Senior, Webster, & Blank, 2004), some scholars have found local variability in consumer housing preferences depending on city size (Dunse, Thanos, & Bramley, 2013) and social and economic conditions (Charney, 2015; Guy & Henneberry, 2000; Lewis & Baldassare, 2010).

Public opposition to infill and intensification was described by planners and media reports across all case studies as a significant barrier to growth management. These echo findings of others who have found NIMBY to be a ubiquitous challenge for urban intensification efforts (Downs, 2005; Searle & Filion, 2011). While all case study regions described NIMBY as a challenge to the creation of infill and higher density development, its influence on planning processes appeared to have greater purchase in Simcoe and Peterborough, where municipal politicians and staff were more receptive to NIMBY concerns. Other studies have revealed that NIMBY can both challenge and support growth management efforts, depending on the particular context. Feldman and colleagues (2012), for example, found that local politicians may use the public process strategically to advance or refute a development, depending on their own motivations (e.g. level of support for a project, desire for economic growth). Searle and Filion (2011) and Gilbert et al. (2005), on the other hand, found that public opposition to growth within peripheral peri-urban areas could generate greater support for intensification efforts.

The presence of growth coalitions – the formal or informal networks established between key decision makers to exert influence on municipal decision making in favour of growth – was consistently reported with low frequency in each of the case study regions. While some news reports questioned the motivations behind the Province's decision to expand to settlement and employment areas within Simcoe (e.g. Gombu, 2009b), few municipal actors interviewed for this research identified coalition building

between decision makers and the development industry as a barrier to Growth Plan implementation. Challenging the growth coalition theory, a number of US and Canadian scholars have found that public stakeholders, particularly homeowners, play a more significant role in municipal politics and decision making than was previously attributed to them through urban regime theories, which emphasized the role of the political and business elite in decision making (Arku, Kemp, & Gilliland, 2011; Been et al., 2014; McGregor & Spicer, 2016). In a study of redevelopment politics in London, Ontario, Cobban (2003) proposed that the configuration of and controls within Canada's political and economic institutions did not favour the emergence of growth coalitions and that the theory had limited applicability to Canada. Others, however, have found coalitions to develop in a variety Canadian contexts, both for and against particular growth and development regimes (Leo, 1995; Leo, 2008; Marquis, 2009; Sutcliffe, 2011). While this research provides some insight into the motivations and interests of key actors, a more targeted assessment of network-building activity between key actors would be necessary to determine the role of possible coalitions in the implementation of growth management policy. Further discussion about areas for future study are presented in Chapter 8.

Summary

This chapter presented a synthesis of the institutions and the interactions between their component barriers that constrain or enable implementation of the Growth Plan within the three case study regions. Barriers to growth management implementation were reviewed using the categories offered by the culturalized model of planning to help reveal the scales at which barriers were concentrated and interacted. A review of the main institutional themes that were found to influence local implementation revealed that institutional rules, identities and belief systems at the planning environment scale served as the scale of primary influence affecting transgressions between local action and Provincial objectives. The institutional themes and component barriers were then explored using key theoretical concepts offered by historical and sociological institutionalism, including mechanisms supporting institutional stability and change, and the role of power and agency. The review demonstrated how the barriers interacted to reinforce the status quo in Simcoe and Peterborough, and where there was movement toward change in Waterloo. It further highlighted the importance of local context as a mediating factor in the expression and magnitude of barriers which in turn helped to structure to local implementation.

Chapter 8. Conclusion

Regional growth management plans across North America have had mixed success, often resulting in a discrepancy between growth management planning objectives and the urban development reality. The uneven success of regional plans is in part a function of the variability in their implementation at the local level – particularly where local municipalities have discretion in how to carry out regional objectives (Brody & Highfield, 2005; Carruthers, 2002a; O'Connell, 2009; Padeiro, 2016). History has demonstrated that even the most well-designed plans are of little value if they are not translated into effective action at the local level.

Ontario's Growth Plan for the Greater Golden Horseshoe is not immune to the challenges of local implementation. Implementation of the Plan has been described as "plagued with problems," which have allowed many municipalities to avoid the fundamental shift required to ensure compact and orderly growth (Neptis Foundation, 2016). While the Province has responded to these and other criticisms (MMAH & MNRF, 2015) with the release of a revised Growth Plan that sets stricter targets and clearer land budgeting methodologies, these technical and policy adjustments may have limited impact on land use outcomes because they fail to address the perceptions and motivations that underpin local municipal conformance. Understanding the underlying factors that influence local implementation is critical in developing effective plans and planning systems.

This research explores the reasons for variable implementation by examining local barriers to the implementation of the Growth Plan for the Greater Golden Horseshoe. In an examination of three Ontario case study regions subject to the Growth Plan, the research tests the relative importance of known and theorized barriers to growth management implementation, and explores the relationships between those barriers and the local context. By conceiving implementation barriers as a system of interdependent variables operating at different planning scales and within particular institutional and local contexts, the research explores the underlying factors and relationships that can lead to regionally unique responses to the challenges of managing urban growth. The research further examines the mechanisms by which barriers to implementation interact with local context to become institutionalized through processes of self-reinforcement, or undermined to create opportunities for change. In exploring patterns of barriers and their interrelationships in each of the three regions, this research attempts to answer the questions: 1) What are the key barriers to local implementation of regional growth management plans? 2) Are barriers archetypical or are they unique to the local context? 3) How do the barriers to implementation relate to one another, and what are the mediating mechanisms that define these relationships? and 4) How do barriers interact to reinforce the status quo? Where are there opportunities for change?

The section that follows summarizes key findings of the research, including the identification of entrenched patterns of barriers and opportunities for innovation and change. It concludes with a discussion about the theoretical contribution of the barrier models and questions for further research.

Key findings

The importance of Local Context

Drawing on a wide range of literatures, this research identified 31 barriers to growth management operating across a spectrum of scales ranging from the unconscious, taken-for-granted societal barriers, to the more visible artifacts of planning practice. Recognizing that these barriers represented potential challenges whose influence may vary in different contexts, the research sought to determine if and how key barriers to growth management varied across three case study regions. In exploring this question, this research confirmed the existence of regionally unique patterns of key barriers that impacted how the Growth Plan for the Greater Golden Horseshoe was interpreted and implemented at the local level. By comparing case study results to a generic model of barriers to growth management, the research revealed that certain barriers played a more important role than others within different regions.

The influence of local context on the different regional patterns of barriers was another topic that this research sought to explore. In examining the scale at which barriers operated in each case study, it became apparent that the concept of scale offered only a partial explanation for the different patterns of barriers found across regions. The existence of shared societal scale barriers highlighted key differences in barrier patterns at the planning and artifact scales but offered an incomplete explanation for the reasons for those differences. The examination of the reinforcing and undermining relationships between barriers and between barriers and local context helped further illuminate the reasons for regionally distinct patterns of key barriers. Differences in local socio-political, economic, and environmental conditions across the three case study regions were found to interact with barriers at all planning scales, and particularly at the planning scale, to create specific governance and planning constraints, market pressures, and belief systems, meanings and norms that framed local implementation of regional growth management objectives. These interactions influenced how the Growth Plan was perceived and communicated by local actors and how growth management objectives were incorporated into policies, plans and decision making processes.

Comparison across regions revealed that the physical condition of being rural, exurban or periurban, and the myriad of related physical, economic and socio-cultural factors, provided significant explanatory power with respect to the different patterns of barriers across regions. With some exceptions, (e.g. Hommels, 2005a; Hommels, 2005b; Richardson & Jensen, 2003; Sorensen, 2016), scholarly works

have treated built form as an object to which planning policy is directed, but rarely has it been explicitly identified as a barrier to the implementation of that policy. In this research, low density urban form was found to play a central role in growth management implementation across all case studies, both as an indicator of unsuccessful implementation and a barrier in itself. The additional physical condition of being rural, exurban or peri-urban was found to heighten the obstructing influence of urban form. Rural and exurban municipalities in Simcoe and Peterborough were found to share particular belief systems that placed a high value on the preservation of small town or rural character, local decision making, and market-led planning, and they faced significant organizational and governance constraints, such as lower planning capacity and fragmented, local decision making that collectively inhibited planning responses to achieve growth management objectives. These factors, combined with significant external growth pressures and internal aspirations for amenity-related development, helped strengthen political opposition to growth management and preferences for local, market-led planning approaches.

In contrast, the urban region of Waterloo demonstrated market constraints and regulatory inconsistencies as key barriers to growth management. In this region, development industry objectives conflicted with local efforts to adopt regional policies to constrain growth, and were supported by a land use tribunal system that favoured conventional, market-led planning approaches. These barriers, however, demonstrated a tenuous impact on local implementation, in part because they failed to align with the local context, which was characterized by an increasingly urban identity, and economic growth contingent on the presence of post-secondary institutions, rather than natural amenities. The impact of market and regulatory barriers to growth management was further undermined by an urban governance institution characterized by a high planning capacity, strong regional coordination, and staff and council support for dense urban forms. Collectively, these factors served to challenge place identity and market barriers by creating openings or "soft spots" for the insertion of actions for change, including new ideas and credible alternatives. These ideas and alternatives included a view of intensification as a means to achieve economic goals, and use of planning tools to shape property markets. As a result, the urban municipalities in this research were found to be more likely to support actions that challenged or undermined existing barriers to growth management.

The relationships between barriers and the mechanisms that led to their reinforcement or change, examined in Chapter 7, provide some answers to the questions posed for this research: How do barriers interact to reinforce the status quo? and Where are there opportunities for change? In the case of the rural and exurban communities of Simcoe and Peterborough, the mechanisms supporting entrenchment of current institutions appeared to prevail over opportunities for change. Key actors in these regions were found to share motivations, meanings and values that favoured low density development both as a source

of identity and differentiation as well as a primary source of economic development. Although some of these and other supporting barriers were challenged by the emergence of new ideas (Peterborough) and Provincial sanctions and veto decisions (Simcoe), the mechanisms for change were insufficient to subvert the stabilizing mechanisms that supported existing place identity, urban governance and property market institutions. Moreover, destabilizing actions failed to resonate with actor groups responsible for local planning and development, leading to strategic and political action to negotiate or subvert Provincial planning policy. These results are consistent with the findings of others (Golding, 2012; C. M. Hall, 2015; Kondo et al., 2012; Woods, 2011) and suggest that regional plans that view rural areas as if they were "downscaled cities" fail to directly address local conditions and do little to challenge entrenched institutions (K. I. Frank & Reiss, 2014, p. 386). A more fruitful treatment of rural regions may be to view them as physical places undergoing locally contingent processes of peri-urbanization, accompanied by a range of supporting social, political and economic institutions (Sorensen, 2016). New planning policy should recognize and address the supporting institutions that are aiding the transition of rural regions to peri-urban regions as well as capitalize on their inherent contradictions (e.g. the changing physical urban form and place identity caused by suburban growth) if it is to become locally institutionalized.

Opportunities for change were more apparent in Waterloo Region. While identified barriers enjoyed support through a wide range of stabilizing mechanisms, areas of opportunity emerged within the institutions of urban governance and land and property markets. These opportunities included strong regional leadership and coordination of growth management objectives, and investment in public transportation, all of which provided a consistent policy framework for local municipalities and developers, and helped reframe intensification as an efficient and credible alternative to achieve economic goals. These actions combined with new ideas emerging from municipal actors and local advocacy groups helped undermine or challenge traditional approaches to managing growth and public support and preferences for car-oriented, low density urban forms. Overall, barriers to growth management in Waterloo faced significant destabilizing mechanisms that created openings for the institutionalization of the Growth Plan.

The Role of Place Identity, Land and Property Markets and Urban Governance

A key finding of this research was the emergence of place identity, land and property markets and urban governance as overarching institutions that served to obstruct or facilitate growth management objectives. The emergence of these institutional themes, depicted in Figure 4, served as more useful synthesis for the grouping of individual barriers and provided greater conceptual clarity than grouping barriers according to the scales of planning culture, as depicted in Figure 3 (This point is discussed in more detail in the next section, Implications for Theory).

This research found that place identity, comprising the physical characteristic of a place, and the motivations, meanings and values that key actors associated with that place, played a significant role in the obstruction of growth management efforts. Place identity barriers were found to play a particularly important role in the rural, exurban and peri-urban communities examined for this research, where they served as an important interpretive frame through which politicians, planners and other stakeholders viewed, evaluated and resisted planning for built forms that were considered incompatible with local character. These findings are consistent with those of others who have described small, amenity-based communities and rural areas as sites where newcomers seek built forms that offer privacy and escape, and existing residents oppose higher density developments (Cadieux & Hurley, 2011; Gilbert et al., 2005; Golding, 2012; Kondo et al., 2012). Recognition of place identity as an important influence on the cultural, economic and political drivers that favour unrestricted, low density urban growth is critical in the identification of practical solutions.

The structuring influence of land and property markets was also identified as an important institution in all case studies, and economic interests were found to significantly influence planning action and decision making by key actors. Comprising private economic interests, municipal economic growth objectives and planners' viewpoints about the role of markets in planning practice, the prevailing land and property market institutions not only created supply and demand challenges for compact urban forms, but also influenced planners' interpretations and responses to those challenges. While the planning literature has long recognized the connections between land and property markets and planning (e.g. Fainstein, 1986; Fainstein, 1991; Weiss, 1987), planning practice rarely explicitly identifies the role that land and property markets play in the planning process (Adams & Tiesdell, 2010). In recognizing the role of markets on political interests, developers' preferences, and planners' efforts to shape, regulate and stimulate real estate markets, Adams and Tiesdell (2013, p. 286) have issued a call "not for planners to become market actors, but rather for them to realise they already are market actors, intricately involved in market construction and reconstruction". The impact of planners' capacity to fully engage in their role as market actors, through education and by challenging the value systems that separate planning from markets was found in this research to be an important factor that influenced municipalities' ability to overcome barriers to growth management. By providing planners with both the tools and capacity required to shape places, municipalities may be better equipped to confront difficult planning issues and adapt to new regional policy.

Urban governance served as the third key institution that influenced growth management efforts. Consisting largely of the organizational structures and processes, regulatory requirements and municipal actors' belief systems that guide planning practice and decision making, urban governance encompassed

much of the operational side of planning practice. Barriers within the urban governance institutions were found to be locally contingent, with rural case study regions demonstrating a more fragmented governance structure, intense inter-municipal competition for development, and lower planning capacity in terms of staff and resources than the urban case study region. These urban governance barriers reduced rural and exurban municipalities' capacity for long term strategic planning and their ability to balance economic development with growth management planning objectives (Birnbaum et al., 2004). Urban governance challenges in rural areas were heightened by amenity migration pressures, which appealed to local economic development objectives, but which placed pressures on local municipalities' capacity to plan for compact, continuous urban forms, and adequate water, waste water infrastructure. Governance structures in general have been described by others as "much better geared to the stationary and the immobile than they are to the movement of people (and capital) between jurisdictions" (C. M. Hall, 2015, p. 4). Amenity migration is not easily managed by local governments, and requires planning and coordination at multiple scales and across disciplines. Small, amenity-rich communities that rely on the permanent and/or temporary movement of people as a significant source of economic growth often lack the capacity to plan around the broader issues associated with amenity migration, such as loss of habitat and natural areas, the transition of vacation homes to permanent ones, and infrastructure to support newcomers. The absence of policies in the Growth Plan that address recreation-related development only served to exacerbate the regulatory challenges in governing growth in amenity regions.

Local Planning to address Regional Objectives

The results of this research confirm that planning at the local scale is often ill-equipped for dealing with planning challenges that have broader regional or global implications, particularly when those broader objectives conflict with local needs and preferences (Pissourios, 2014). If new planning legislation is to be adopted at the local level, there needs to be a consideration of the myriad of other less visible and locally-contingent, institutionalized barriers that can obstruct implementation, (Buitelaar et al., 2011; Sánchez & Maseda, 2016). Efforts to institutionalize a new regulatory framework require the recognition that the practice of planning is embedded in a broader planning culture, rather than a purely technical, rational activity (Booth, 2011; Friedmann, 1967; Othengrafen & Reimer, 2013). As this research demonstrated, land use planning is a negotiated and complex process rooted in local conditions, motivations, and belief systems (Servillo & Van Den Broeck, 2012). As a socially constructed process, planning is guided by underlying, and often taken-for-granted, assumptions and belief systems that lead to particular planning actions that can inhibit or facilitate transformative change. Understanding and challenging these underlying assumptions is critical for reflexive and effective planning practice (Friedmann, 1967).

In recognition of the failed application of certain planning approaches at the local level, some scholars have argued for a more multi-faceted and nuanced view of planning that recognizes the unique needs, pressures and values of the communities responsible for implementation. Solutions to planning challenges in rural and exurban regions have focused on collaborative planning and co-management planning approaches, which are argued to better recognize and address unique local conditions, empower local actors, and achieve more democratic outcomes (K. I. Frank & Reiss, 2014). These approaches are theorized to provide a forum for more open and objective communication in which actors are encouraged to be self-reflective and seek consensus on solutions that achieve the common good (Fischler, 2000; Healey, 1992; Innes, 1995). Provincial-local processes for social learning may help to highlight and explore contradictions in rural planning objectives (e.g. natural amenities as focal points for both growth and protection), and market-led planning practices. Collective recognition of barriers to growth management, particularly at the planning environment scale, may also help identify solutions that destabilize patterns of reinforcement and legitimize alternatives.

Collaborative planning as a solution for regional problems such as low density urban growth, however, is challenged by many real world conditions that compromise its usefulness as a planning tool. To avoid a single group from co-opting the process, collaborative planning efforts are required to adhere to a communicative rationality, in which power is shared equally across participants, and participants work to identify mutually beneficial compromises to achieve a common good (Phelps & Tewdwr-Jones, 2000; Roy, 2015). The emphasis on democratic process rather than outcome, can lead to planning failures when the process fails to produce the desired outcome (e.g. growth management) (Young, 2011). Scholars have questioned the value of decision making processes that give greater weight to local interests in the development of solutions to manage extra-local problems, such as urban sprawl (Morrison, Lane, & Hibbard, 2015). Local interests such as preferences for unrestricted amenity-based growth and the maintenance of existing, low density urban forms, for example, can hinder achievement of broader regional growth management objectives. Collaborative planning also risks overemphasizing the value of local knowledge at the expense of technical knowledge (Morrison et al., 2015). This may be a particular concern for regions in which there is a demonstrated absence of local planning capacity.

Decision making that focuses on the achievement of particular planning outcomes at the expense of a more democratic decision making process, on the other hand, has been criticized as being overly authoritarian (Young, 2011). Tensions can arise when policy makers circumvent or manipulate democratic processes to achieve desired planning outcomes (Young, 2011). These challenges may help explain why the Growth Plan, which according to the former Deputy Minister of MMAH, Brad Graham, was developed in conjunction with an unprecedented amount of municipal consultation, still failed to

garner the support of key municipal stakeholders in rural regions. The findings of this research call attention to the areas in which consultation and action may be further required to undermine or challenge entrenched institutional arrangements that constrain implementation. A more strategic, multifaceted approach, including the reframing of issues and problems, and the weakening of institutional logics may be necessary to overturn local resistant to regional policy change.

Implications for Theory

This research partially answers a call from Hall and Taylor (1996) and Hall (2007) for a better interchange among the schools of new institutionalism. It does this by merging theoretical insights offered by historical and sociological institutionalism to provide an improved understanding institutions, their influence on action and their likelihood to change. In doing so, the research attempts to "reveal different and genuine dimensions of human behavior and of the effects institutions can have on behaviour" that could be overlooked with the application of a single new institutional approach (P. A. Hall & Taylor, 1996, p. 955). By merging the historical and sociological institutionalism definitions of institution and conceptions of how institutions influence action, this research demonstrates a number of areas of complementarity and compatibility. In particular, the results of this research demonstrate that institutions structuring plan implementation do indeed include not just formal and informal organizations, rules and practices, but also "the symbol systems, cognitive scripts, and moral templates that provide the 'frames of meaning' guiding human action" (P. A. Hall & Taylor, 1996, p. 947)". The two dimensions would not have been fully captured without a merged historical and sociological institutionalist definition of institution. The results of this research also confirm Hall and Taylor's (1996) proposition that action is best understood as a combination of both strategic decision making, and cultural influences, whereby the range of options perceived by a strategic actor may be limited to a subset of culturally-appropriate options.

This research also combines the theoretical frameworks of historical and sociological institutionalism with the organizing framework of planning culture to advance our understanding of how barriers to implementation are influenced by local context. Both frameworks have been used individually to examine the role of structuring forces on planning action (e.g. González & Healey, 2005; Healey, 2005; Healey, 2007; Othengrafen & Reimer, 2013; Othengrafen, 2010). Their conceptual strength lies, in part, in their comprehensive interpretation of the forces that influence action, including not just formal, regulatory structures, such as laws, planning policy and organizations but also informal, less visible and taken-for-granted beliefs, values and norms. The broad definition helps avoid myopic perspectives of local planning as a solely rational, technical response to local needs and broader policy frameworks,

rather than one that is socially-embedded and value-laden. An outcome of this expanded view of barriers was the identification of low density urban form as an important structuring influence on planning practice, and the articulation of specific beliefs and value systems that played a key role in influencing planners' and politicians' actions. Results from this research confirmed that, regardless of geography, key barriers to growth management implementation included both formal structures (e.g. low density urban form, county-city governance systems, and the Ontario Municipal Board) and informal structures (e.g. the values and belief systems of planning staff, politicians and developers and the preferences of consumers).

The model of planning culture introduced additional analytical value for understanding barriers to implementation by providing an organizing framework to identify and categorize the scale at which barriers operated. The model provided a useful lens for ensuring the identification of less visible barriers, such as underlying belief systems and values, which played an important but indirect role in the maintenance of low density urban forms. In absence of a sensitizing framework, invisible, underlying barriers may have been missed in the identification of possible or anticipated barriers that made up the model. The model also helped in the differentiation between barriers at the artifact scale (the outputs of the planning process) and planning environment scale (the rules conventions, beliefs, and value systems inherent in the practice of planning), which helped in the identification of causal practices or beliefs that were connected to particular outcomes. This may have prevented an over emphasis on the tangible barriers in the analysis. As well, the scalar component of the model helped serve as a form of synthesis, allowing for general conclusions regarding the relative importance of each scale on implementation. In the case of this research, the categorization of barriers by scale helped highlight the fact that while societal barriers were fairly consistent across case study regions, the planning environment scale functioned as a critical interception point or filter through which societal barriers were translated into artifacts. The identification of the planning environment as a key scale of interaction was reinforced by findings of the relational models in which urban governance emerged as a key institution. The focus on the planning environment and its emphasis on the shared assumptions, values and cognitive frames of political actors, planners, and developers called attention to the important role of implementing agents and their discretion and socialization as part of the implementation process. The identification of planning environment as an important scale of analysis has been identified by others, such as Lowndes (2009), who identified this institutional scale as "locally specific cultures and conventions ('how things are done around here')". Suitner (2014) similarly described this scale as comprising the traditions and attitudes around the practice of planning. The focus on planning environments by Suitner (2014), Othengrafen (2010) and others (Hamedinger, 2014; Haselsberger & Hamedinger, 2014; Knieling & Othengrafen, 2015) is part of a growing body of work examining the factors affecting the transferability of centralized

planning policies to different countries or regions. These scholars argue for the need for increased sensitivity to local cultures, including local planning environments, when applying planning policies to new areas. Given the important influence of distinct planning environments on policy outcomes, parallels may exist between studies of policy transferability and the application of Provincial policy to urban and rural areas.

By including a third scale of operation, the model of planning culture permitted an expansion on binary conceptions of implementation (e.g. top-down and bottom up variables). The categorization of barriers into three scales of analysis helped to move the examination of implementation beyond the actions of rule makers and rule takers, to include a wider range of formal and informal influencing structures, from societal influences to more visible plans and processes. Scholars from a range of new institutional theoretical streams have recognized that institutional change is contingent on the scale at which change is imposed and the interconnections between scales (Lowndes, 2009; Scott, 2014). The model of planning culture helped to inform the new institutional framework by embedding the scale at which a barrier can be perceived directly into the analytical model. The recognition of scale also provided some clarity and structure for new institutional thinking by helping to tease apart implementing agents from the products of the planning process and broader societal influences. Given that institutional stability and change are a function of influencing processes and the effects of those processes (Delbridge & Edwards, 2007; Lowndes, 2009), the inclusion of the artifact scale in the analytical framework helped ensure that the spatial and policy effects were not overlooked. Moreover, the scales of planning culture helped to ensure that the beliefs, values and conventions of actors at the planning environment scale were not conflated with the outcomes of their actions by defining those outcomes as artifacts in a separate, but connected scale of analysis.

This research also revealed a number of shortcomings in the planning culture model. In its identification of the three scales of influence, the model suggested a nested relationship between scales, where artifacts were nested within the planning environment, and the planning environment was nested within the societal environment. The model's hierarchical depiction of scales did not account for possible direct interactions between artifacts and societal scale factors and provided limited insight on whether interactions occurred within scales. The nested nature of the three scales was not well suited for recognizing what social institutionalists consider to be a key characteristic of the social structures that comprise institutions: that social structures can be both a mediating variable and also an outcome of action, and that actors are both bounded by them and embedded within them (Delbridge & Edwards, 2007; Healey, 2007). Under this premise, barriers at a particular scale could be expected to demonstrate a more complex set of interrelationships. The results of this research, including the generic model of

barriers to growth management developed in Figure 4, did in fact demonstrate a much more complex picture of interrelationships that included interactions between barriers across and between scales, sometime resulting in direct interactions between societal scale and the artifact scale and frequently demonstrating interactions within any given scale. The recognition of these interconnections was critical in the understanding of how existing barriers that influenced planning practice were challenged or perpetuated.

In its depiction of potential and known relationships between barriers, the model in Figure 4 provided a better understanding of the complex and dynamic interrelationships between barriers within different local contexts. The model revealed that barriers generally coalesced around the three broad institutional themes of place identity, land and property markets and urban governance. The identification of these institutional themes complements scholarly works that have sought to synthesize the factors that influence institutional change. Such works have focused on the characteristics of the institutions, but have not identified the relevant institutions themselves (Delbridge & Edwards, 2007; Mahoney & Thelen, 2009; March & Olsen, 2009). The identification of key framing institutions and their interactions complements these literatures by defining particular institutional structures that influence action in a local planning setting. The categorization of barriers within the three framing institutions also responds to challenges in the implementation literature identified by O'Toole (2000), regarding the vast number of implementation variables that challenge efforts at a synthesis. The institutional themes provide a form of synthesis by grouping barriers according to meaningful interrelationships. The themes further offer a conceptual frame for analyzing and understanding the broader institutional logic and conventions underlying the barrier groupings. Without this conceptual framing provided by the model, the analysis of how barriers interacted may have been more disjointed and abstract. The model further helps refocus our understanding of plan implementation from one that emphasizes implementation as a technical challenge preoccupied with issues such as plan quality and administrative efficiency, to one that recognizes its social, cultural and political roots. In doing so, it provides a possible explanation for why empirical studies have found weak relationships between the existence of growth management policies and actual changes to the built form (Anthony, 2004; Boyle & Mohamed, 2007).

Scholars have identified that the temporal scale is also an important factor in the change and entrenchment of institutions (Lowndes, 2009; Mahoney & Thelen, 2009; Scott, 2014) and historical institutionalists have used time and sequencing of events as a focal point for examining institutional change. Examinations of institutional change that do not adopt a historical institutionalist approach may benefit from the use of the model in this research because of its integration of mechanisms leading to institutional stability and change over time (Tables 2 and 3). Some of these mechanisms (e.g. legitimacy,

familiarity, new ideas) by definition, incorporate the notion of time and its solidifying effect on beliefs and practices, or conversely, its introduction of novelty. These time sensitive mechanisms were found to play an important role on the relatively stability of barriers to growth management.

The mechanisms examined for this research also confirmed the importance of both structure (e.g. cultural support and legitimacy) and agency (e.g. discretion and veto power) in reinforcing existing barriers to growth management. The dual role of structure and agency has been recognized in the recent theoretical literatures as important for providing a more fulsome explanation of incremental institutional change (Mahoney & Thelen, 2009). Of particular importance to smaller rural communities in Peterborough and Simcoe was the role that legitimacy and familiarity played to reinforce place identity, land and property market barriers, and a governance system whose actors advocated for reduced Growth Plan targets and used discretion to interpret and adapt the Growth Plan in a manner that would limit transformative change to the status quo. While Waterloo shared many of the same societal scale stabilizing forces that supported existing land and property markets and place identity, these forces were partially undermined by an evolving governance institution that adopted destabilizing incentives, sanctions, new ideas, and credible alternatives. Waterloo municipal and political actors further used discretion and veto power as a means to challenge barriers that enjoyed cultural support and legitimacy.

Results of this research build on the extant growth management implementation literature by deepening our understanding of the relationship between local context, institutions and action. It does this by examining how obstacles to the implementation of a growth management plan are perceived, justified and reinforced through local planning cultures, planning policies and processes. It highlights the importance of local context on the interpretation, management and expression of broader scale, societal barriers. Explanations of the locally contingent responses to the Province's Growth Plan help highlight crucial contextual factors that may impact how regional growth management policy will be interpreted and adopted and implemented in other regions that share similar contexts.

Areas for Further Research

While a central strength of this research was the interdisciplinary examination of implementation, and the integration of concepts of planning culture with new institutional theory, the approach also raised a number of challenges and questions. The purpose of merging the culturalized model of planning proposed by Othengrafen (2010) with the new institutional literature's conceptions of institutions into one conceptual framework was to provide a more nuanced understanding of the scale at which barriers obstructed or enabled local growth management implementation. Attention to the three scales of planning helped in the identification of barriers, ensuring that barriers represented a continuum of visibility, from

regulative systems, normative systems and cultural-cognitive systems (Scott, 2014); however, the scalar categories provided little predictive power for interactions that occurred within or across scales. As a result, the inclusion of the three scales into the combined conceptual framework (Figure 4) provided limited insight into the relationships, patterns and clustering of barriers. The arrangement of barriers according to the strength of their reinforcing relationships rather than the scale at which they operated provided a more useful depiction of barriers as a complex system that coalesced around institutional themes. And yet, according to Lowndes (2009), scale and the relationships between scales are a critical factor in the study of institutions, and relationships between scales can determine how change at one scale is incorporated or rejected at another scale. A possible reason for challenges associated Othengrafen's (2010) model was that in the adaptation of three cognitive scales proposed by Schein (2017) to a system of three organization-based planning scales, the model may have conflated two distinct areas of inquiry, namely the cognitive scale at which barriers originate, and the operational scale at which they are expressed. Further explorations of independent influence of cognitive scale and the operational scales of planning would assist in the understanding of the relative importance of scale on institutional stability and change.

A second area that would benefit from further inquiry is the relationship between barriers to implementation and conformance with growth management policy. A methodological challenge of this research was its reliance on qualitative data in the form of documents, media reports and interviews, to measure barriers to growth management implementation. The use of qualitative data helped illustrate the planning cultures of different case study areas and their responses to the Growth Plan, but with the exception of some secondary sources that examined the Growth Plan implementation (e.g. Allen & Campsie, 2013; Neptis Foundation, 2017) the study did not relate barriers to growth management to local conformance to Growth Plan objectives. An empirical study that measures implementation of key objectives of the Growth Plan, including achievement of density and intensification targets, and the rate and form of urban growth before and after the Plan, would help complement this study and comparisons could further illuminate the role that barriers and local context play in Growth Plan conformance.

A third area of inquiry that would expand on the findings of this research is the exploration of how planning policy might be adapted to different geographic regions. This research highlighted important challenges associated with the application of a regional growth management plan to rural, exurban and per-urban regions. Findings of this research suggest that some regions may be unsupportive of new planning policies or unable to implement them for a wide range of reasons, many of which are cultural and unconscious. And yet regional scale policies have been identified as one of the most effective way to deal with the negative externalities of growth, which are not easily perceived or managed at the

local level (Chapin, 2012; Wassmer, 2008). This dichotomy raises the question: how can regional-scale challenges, such as low density urban growth, be addressed in a way that works for those who are tasked with implementing the solution? Recognizing that barriers to growth management reported in this research point to distinct place identity, land and property markets, and urban governance institutions within rural, exurban and peri-urban regions that obstruct local implementation, a more specific question warrants further exploration: What approaches will address the specific barriers to implementation facing rural, peri-urban and exurban regions?

To answer these questions, this research highlights possible areas of further inquiry. Since the institutionalization of a new regulatory framework requires the replacement or modification of old institutions with new institutions, which occurs within the "soft spaces" that exist between regulatory frameworks and actors' interpretations and implementation of those frameworks (Mahoney & Thelen, 2009), identification of the institutional soft spaces in rural communities would assist in targeting areas for intervention. This research highlights some areas where possible soft spaces exist, including: 1) the conflicting rationalities that underpin local objectives for amenity-related economic growth and the conservation of natural and rural amenities to support that growth and local place identities and 2) reduced governance, planning and resource capacity in regions that experience intense pressures for amenity related growth. A deeper exploration of the regulatory, economic and cognitive frames that that guide and enable amenity related development, and the role of evolving urban forms on the institutional logics place identity could help identify opportunities to undermine the stability of existing institutions and identify specific opportunities for change.

References

- Aarsaether, N., & Ringholm, T. (2011). The rural municipality as developer entrepreneurial and planning modes in community development. *Lex Localis*, *9*(4), 373-387.
- Adamiak, C. (2016). Cottage sprawl: Spatial development of second homes in Bory Tucholskie, Poland. *Landscape and Urban Planning*, 147, 96-106. 10.1016/j.landurbplan.2015.11.003
- Adams, D. (2008). Mapping out the regulatory environment and its interaction with land and property markets. *Energy Policy*, 36(12), 4570-4574. 10.1016/j.enpol.2008.09.009
- Adams, D., Disberry, A., Hutchison, N., & Munjoma, T. (2002). Land policy and urban renaissance: the impact of ownership constraints in four British cities. *Planning Theory and Practice*, *3*, 195-217.
- Adams, D., & Tiesdell, S. (2010). Planners as market actors: Rethinking state-market relations in land and property. *Planning Theory and Practice*, 11(2), 187-207.
- Adams, D., & Tiesdell, S. (2013). *Shaping Places: Urban planning, design and development*. New York: Routledge.
- Akbari, H., Rose, L. S., & Taha, H. (2003). Analyzing the land cover of an urban environment using high-resolution orthophotos. *Landscape and Urban Planning*, 63(1), 1-14.
- Alexander, E. R. (2001). A transaction-cost theory of land use planning and development control toward the institutional analysis of public planning. *Town Planning Review*, 72(1), 45-75.
- Alexander, E. R. (2014). Land-property markets and planning: A special case. *Land use Policy*, 41, 533-540. 10.1016/j.landusepol.2014.04.009
- Alexander, E. R., & Faludi, A. (1989). Planning and plan implementation: Notes on evaluation criteria. Environment & Planning B: Planning & Design, 16(2), 127-140.
- Ali, A. K. (2014). Explaining smart growth applications: Lessons learned from the US Capital Region. *Urban Studies*, *51*(1), 116-135.

- Ali, A. K. (2016). Explaining city applications of smart growth policies: insights from Maryland, USA. International Journal of Urban Sustainable Development, 8(2), 210-228. 10.1080/19463138.2015.1078336
- Allan, T. J., McGillivray, J., & Allan, D. (2017). *Undelineated built-up areas: A gap that could undermine the Growth Plan*. Report commissioned by the Neptis Foundation.
- Allen, R., & Campsie, P. (2013). *Implementing the Growth Plan for the Greater Golden Horseshoe: Has the regional strategic vision been compromised?* Toronto: Neptis Foundation.
- Allmendinger, P., & Haughton, G. (2010). Spatial planning, devolution, and new planning spaces. Environment and Planning C: Government and Policy, 28(5), 803-818.
- American Planners Association (APA). (2007). National planning awards 2007. Retrieved from http://www.planning.org/awards/2007/index.htm
- Anthony, J. (2004). Do state growth management regulations reduce sprawl? *Urban Affairs Review*, 39(3), 376-397. 10.1177/1078087403257798
- Arku, G., Kemp, J., & Gilliland, J. (2011). An analysis of public debates over urban growth patterns in the City of London, Ontario. *Local Environment*, 16(2), 147-163. 10.1080/13549839.2011.553589
- Association of Municipalities Ontario. (2007). Understanding Canada's municipal infrastructure deficit. Retrieved from http://www.amo.on.ca
- Astbury, B., & Leeuw, F. (2010). Unpacking black boxes: Mechanisms and theory building in evaluation. American Journal of Evaluation, 31(3), 363-381. 10.1177/1098214010371972
- Baer, W. C. (1997). General plan evaluation criteria: An approach to making better plans. *Journal of the American Planning Association*, 63(3), 329-344.
- Bain, A., & Marsh, J. (2012). Peterborough: A georegion in transition? In G. Nelson (Ed.), *Beyond the global city: Understanding and planning for the diversity of Ontario* (pp. 151-168). Montreal, Kingston: McGill-Queen's University Press.
- Bardach, E. (1977). *The implementation game: What happens after a bill becomes a law*. Cambridge, Mass.: MIT Press.

- Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and structuration: Studying the links between action and institution. *Organization Studies*, 18(1), 93-117.
- "Barrie and its neighbours at odds over future growth". (Nov 06, 2007). Barrie Advance.
- Basmajian, C. (2013). Jimmy Carter and Joe Frank Harris: Creating growth management planning in Georgia, 1971-1989. *Planning Perspectives*, 29(4), 147-173.
- Baum-Snow, N. (2007). Did highways cause suburbanization? *Quarterly Journal of Economics*, 122(2), 775-805.
- Been, V., Madar, J., & Mcdonnell, S. (2014). Urban land-use regulation: Are homevoters overtaking the growth machine? *Journal of Empirical Legal Studies*, 11(2), 227-265.
- Béland, D. (2005). Ideas and social policy: An institutionalist perspective. *Social Policy and Administration*, 39(1), 1-18.
- Béland, D. (2009). Ideas, institutions, and policy change. *Journal of European Public Policy*, 16(5), 701-718. 10.1080/13501760902983382
- Bengston, D. N., Fletcher, J. O., & Nelson, K. C. (2004). Public policies for managing urban growth and protecting open space: Policy instruments and lessons learned in the United States. *Landscape and Urban Planning*, 69(2-3), 271-286. 10.1016/j.landurbplan.2003.08.007
- Ben-Zadok, E. (2005). Consistency, concurrency and compact development: Three faces of growth management implementation in Florida. *Urban Studies*, 42(12), 2167-2190.
- Ben-Zadok, E. (2009). The ups and downs of Florida growth policy, 1971-2008. *Planning Practice and Research*, 24(3), 379-387.
- Berger, P. L. (1966). In Luckmann T. (Ed.), *The social construction of reality: a treatise in the sociology of knowledge* (1st ed.). Garden City, N.Y.: Doubleday.
- Berke, P., Backhurst, M., Day, M., Ericksen, N., Laurian, L., Crawford, J., & Dixon, J. (2006). What makes plan implementation successful? An evaluation of local plans and implementation practices in New Zealand. *Environment and Planning B-Planning & Design*, 33(4), 581-600. 10.1068/b31166

- Berke, P., & Conroy, M. M. (2000). Are we planning for sustainable development? *Journal of the American Planning Association*, 66(1), 21-33.
- Berke, P., & Godschalk, D. (2009). Searching for the good plan: A meta-analysis of plan quality studies. *Journal of Planning Literature*, 23(3), 227-240. 10.1177/0885412208327014
- Berke, P., Spurlock, D., Hess, G., & Band, L. (2013). Local comprehensive plan quality and regional ecosystem protection: The case of the Jordan Lake watershed, North Carolina, U.S.A. *Land use Policy*, *31*, 450-459. 10.1016/j.landusepol.2012.08.009
- Berkeley Consulting Group Ltd. (2010). *Councillors' workshop, Simcoe, 24 June 2010*. (Report to Simcoe County Council Committee of the Whole).
- Bervoets, W., & Heynen, H. (2013). The obduracy of the detached single family house in Flanders. International Journal of Housing Policy, 13(4), 358-380. 10.1080/14616718.2013.840109
- Birnbaum, L., Nicolet, L., & Taylor, Z. (2004). Simcoe County: The new growth frontier. Toronto: Neptis Foundation.
- Blais, P. (2003). Smart development for smart growth. (Smart Growth Series). Toronto: Neptis Foundation.
- Blais, P. (2010). Perverse cities: Hidden subsidies, wonky policy and urban sprawl. Toronto: UBC Press.
- Boarnet, M. G. (2011). A broader context for land use and travel behavior, and a research agenda. *Journal of the American Planning Association*, 77(3), 197-213.
- Boarnet, M. G., McLaughlin, R. B., & Carruthers, J. I. (2011). Does state growth management change the pattern of urban growth? Evidence from Florida. *Regional Science and Urban Economics*, 41(3), 236.
- Booth, P. (1996). Controlling development certainty and discretion in Europe, the USA and Hong Kong. London; Bristol, Pa.: UCL Press.
- Booth, P. (2011). Culture, planning and path dependence: Some reflections on the problems of comparison. *Town Planning Review*, 82(1), 13-28. 10.3828/tpr.2011.4

- Bourne, L. S., Taylor, L., Maurer, J., Luka, N., & Bunce, M. (2003). Contested ground: the dynamics of peri-urban growth in the Toronto Region. *The Canadian Journal of Regional Science*, 26(2/3), 251-269.
- Boyle, R., & Mohamed, R. (2007). State growth management, smart growth and urban containment: A review of the US and a study of the heartland. *Journal of Environmental Planning and Management*, 50(5), 677.
- Bradford, N. (2003). Public-Private Partnership? Shifting Paradigms of Economic Governance in Ontario. Canadian Journal of Political Science, 36(5), 1005-1033.
- Bradford, N. (2010). Economic ideas and development strategy: The case of London, Ontario. *Canadian Journal of Urban Research*, 19(1), 1-22.
- Bramwell, A., & Wolfe, D. A. (2008). Universities and regional economic development: The entrepreneurial University of Waterloo. *Research Policy*, *37*(8), 1175-1187.
- Brennan, R. (2002). 'Smart growth' panel to plot Ontario's future: Group will advise province on plans for next 20 years. *Toronto Star*, pp. 18.
- Brenner, N. (2001). The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography*, 25(4), 591-614. 10.1191/030913201682688959
- Brenner, N., & Theodore, N. (2002). Cities and the geographies of "actually existing neoliberalism". *Antipode*, 34(3), 349-379. 10.1111/1467-8330.00246
- Brody, S. D., Carrasco, V., & Highfield, W. E. (2006). Measuring the adoption of local sprawl Reduction planning policies in Florida. *Journal of Planning Education and Research*, 25(3), 294-310. 10.1177/0739456X05280546
- Brody, S. D., & Highfield, W. E. (2005). Does planning work? Testing the implementation of local environmental planning in Florida. *Journal of the American Planning Association*, 71(2), 159-175. 10.1080/01944360508976690
- Brown, J. R., Morris, E. A., & Taylor, B. D. (2009). Planning for cars in cities: Planners, engineers, and freeways in the 20th century. *Journal of the American Planning Association*, 75(2), 161-177. 10.1080/01944360802640016

- Brueckner, J. K. (2000). Urban sprawl: Diagnosis and remedies. *International Regional Science Review*, 23(2), 160-171.
- Brueckner, J. K. (2001). Urban sprawl: lessons from urban economics. *Brookings-Wharton Papers on Urban Affairs*,
- Brueckner, J. K., & Kim, H. A. (2003). Urban sprawl and the property tax. *International Tax and Public Finance*, 10(1), 5-23.
- Buitelaar, E., Galle, M., & Sorel, N. (2011). Plan-led planning systems in development-led practices: An empirical analysis into the (lack of) institutionalisation of planning law. *Environment and Planning A*, 43(4), 928-941.
- Buitelaar, E., & Segeren, A. (2011). Urban structures and land. The morphological effects of dealing with property Rights. *Housing Studies*, *26*(5), 661-679.
- Bunce, S. (2004). The emergence of 'Smart Growth' intensification in Toronto: Environment and economy in the new Official Plan. *Local Environment*, 9(2), 177-191. 10.1080/1354983042000199525
- Bunting, T., & Filion, P. (1999). Dispersed city form in Canada: A Kitchener CMA case example. *Canadian Geographer*, 43(3), 268-287.
- Bunting, T., Filion, P., Hoernig, H., Seasons, M., & Lederer, J. (2007). Density, Size, Dispersion: Towards Understanding the Structural Dynamics of Mid-Size Cities. *Canadian Journal of Urban Research*, 16(2), 27-52.
- Burby, R. J. (2003). Making plans that matter: Citizen involvement and government action. *Journal of the American Planning Association*, 69(1), 33-49.
- Burby, R. J. (2005). Have state comprehensive planning mandates reduced insured losses from natural disasters? *Natural Hazards Review*, *6*(2), 67-81.
- Cadieux, K. V., & Hurley, P. (2011). Amenity migration, exurbia, and emerging rural landscapes: global natural amenity as place and as process. *GeoJournal*, 76(4), 297-302. 10.1007/s10708-009-9335-0

- Cadieux, K. V., Taylor, L. E., & Bunce, M. F. (2013). Landscape ideology in the Greater Golden Horseshoe Greenbelt Plan: Negotiating material landscapes and abstract ideals in the city's countryside. *Journal of Rural Studies*, *32*, 307-319.
- Cadigan, J., Schmitt, P., Shupp, R., & Swope, K. (2011). The holdout problem and urban sprawl: Experimental evidence. *Journal of Urban Economics*, 69(1), 72-81. 10.1016/j.jue.2010.08.006
- Caldwell, W., & Weir, C. (2002). Ontario's Countryside: A Resource to Preserve or an Urban Area in Waiting? Severance Activity in Ontario's Agricultural Land. Unpublished manuscript.
- Calkins, H. W. (1979). The planning monitor: An accountability theory of plan evaluation. *Environment and Planning A*, 11(7), 745-758.
- Campaign Lake Simcoe. (2010). Continuing to promote sprawl in Simcoe County: Campaign Lake Simcoe's response to the proposed Simcoe Amendment to the Growth Plan. Unpublished manuscript.
- Canadian Broadcasting Corporation. (Apr 15, 2013). Province to join Region in attempt to save development plan. *CBC News*.
- Canadian Urban Transit Association. (2011). *National transit policy frameworks: What will Canada learn from other countries?* (No. 40). Toronto: CUTA.
- Capoccia, G. (2016). When do institutions "bite"? Historical institutionalism and the politics of institutional change. *Comparative Political Studies*, 49(8), 1095-1127. 10.1177/0010414015626449
- Carrick, R. (January 20, 2014). Why Canada's cult of homeownership is in trouble. *Globe and Mail*. Retrieved from: https://www.theglobeandmail.com/globe-investor/personal-finance/household-finances/why-canadas-cult-of-home-ownership-is-in-trouble/article16419965/
- Carruthers, J. I., & Ulfarsson, G. F. (2003). Urban sprawl and the cost of public services. *Environment and Planning B: Planning and Design*, 30(4), 203-522.
- Carruthers, J. I. (2002a). Evaluating the effectiveness of regulatory growth management programs: An analytic framework. *Journal of Planning Education and Research*, 21(4), 391-405. 10.1177/0739456X0202100404

- Carruthers, J. I. (2002b). The impacts of state growth management programmes: A comparative analysis. *Urban Studies*, *39*(11), 1959-1982. 10.1080/0042098022000011317
- Casello, J. M. (2015). Suburban infrastructure and transportation choice, global suburban infrastructure workshop, University of Waterloo, June 14-16, 2015. Unpublished manuscript.
- Casello, J. M., Law, J., Drescher, M., Lewis, G., Feick, R., Moos, M., Hammond, K., Parker, D., Johnson, L., Shipley, R. (2013). *Open letter regarding ruling of the Ontario Municipal Board (OMB) on the Region of Waterloo's Official Plan (ROP)*. Unpublished manuscript.
- Cervero, R. (2003). Road expansion, urban growth, and induced travel: A path analysis. *Journal of the American Planning Association*, 69(2), 145-164.
- Chapin, T. S. (2007). Local governments as policy entrepreneurs: Evaluating Florida's "concurrency experiment". *Urban Affairs Review*, 42(4), 505-532. 10.1177/1078087406295275
- Chapin, T. S. (2012). Introduction: From growth controls, to comprehensive planning, to smart growth: Planning's emerging fourth wave. *Journal of the American Planning Association*, 78(1), 5-15.
- Charney, I. (2005). Re-examining suburban dispersal: Evidence from suburban Toronto. *Journal of Urban Affairs*, 27(5), 467-484.
- Charney, I. (2015). Downtown redevelopment and land-use regulation: Can planning policies discipline property development? *Land use Policy*, 47(Complete), 302-308. 10.1016/j.landusepol.2015.04.019
- Chawla, R. K. (2011). The distribution of mortgage debt in Canada. *Perspectives on Labour and Income, Statistics Canada Catalogue no. 75-001-XIE, 23*(2)
- Chipeniuk, R. (2004). Planning for amenity migration in Canada. *Mountain Research and Development,* 24(4), 327-335. 10.1659/0276-4741(2004)024[0327:PFAMIC]2.0.CO;2
- Choko, M., & Harris, R. (1990). The local culture of property: a comparative history of housing tenure in Montreal and Toronto. *Annals Association of American Geographers*, 80(1), 73-95.
- Church, E., & Grant, K. (2012). Toronto's Mayor Ford vows to 'lead the charge' in halting light-rail transit. *The Globe and Mail*.

- Churchyard, A., & Caldwell, W. (2011). The cost of community services in the Township of Cavan Monaghan: A literature review on the fiscal impacts of land use for municipalities in Ontario, Canada. Township of Cavan Monaghan.
- City of Barrie. (2008). City of Barrie Intensification Strategy. (No. PLN051-081028).
- City of Barrie. (April 28, 2009). *Barrie's vision supports sustainable growth [Press Release]*. Unpublished manuscript.
- City of Cambridge. (2012). 2012 Cambridge Official Plan. Cambridge, Ontario:
- City of Peterborough. (1981, amended 2009). *The Official Plan of the City of Peterborough, Official Consolidation*. Peterborough: Ontario.
- City of Peterborough Planning Division. (2009a). Central area masterplan Final report.
- City of Peterborough Planning Division. (2009b). Planning Peterborough to 2031: How the Growth Plan for the Greater Golden Horseshoe will affect the City of Peterborough.
- City of Peterborough Planning Division. (2011). City of Peterborough residential monitoring report, 2011.
- City of Peterborough, Land Information Services Division. (2008). *Historic City Limits (1825 2008)*. Peterborough.
- City of Waterloo. (2002). Height and Density Policy Discussion Paper. (No. DS02-38). Waterloo:
- City of Waterloo. (2012). Official Plan. Waterloo: Ontario.
- Clearview Township. (2009). Directions for growth: A growth plan for Clearview 2009-2031. Clearview: Ontario
- Cloke, P., & Hanrahan, P. (1984). Policy and implementation in rural planning. *Geoforum*, 15(2), 261-269. 10.1016/0016-7185(84)90037-X
- Cloke, P., & Little, J. (1987). Policy, planning and the state in rural localities. *Journal of Rural Studies*, 3(4), 343-351. 10.1016/0743-0167(87)90053-2

- Cobban, T. (2003). The political economy of urban redevelopment: Downtown revitalization in London, Ontario, 1993-2002. *Canadian Journal of Urban Research*, 12(2), 231-248.
- Cohen, M. J. (2012). The future of automobile society: A socio-technical transitions perspective. *Technology Analysis and Strategic Management, 24*(4), 377-390.
- Coiacetto, E. (2000). Places shape place shapers? Real estate developers' outlooks concerning community, planning and development differ between places. *Planning Practice and Research*, 15(4), 353-374.
- Commission on the Reform of Ontario's Public Services. (2012). *Public services for Ontarioans: A path to sustainability and excellence*. Queen's Printer for Ontario.
- Conteh, C. (2011). Policy implementation in multilevel environments: Economic development in Northern Ontario. *Canadian Public Administration*, *54*(1), 121-142.
- Conzen, M. R. G. (2004). In Conzen M. P. (Ed.), *Thinking about urban form: papers on urban morphology*, 1932-1998. Oxford; New York: Peter Lang.
- Counsell, D., Haughton, G., & Allmendinger, P. (2014). Growth Management in Cork through boom, bubble and bust. *European Planning Studies*, 22(1), 46-63.
- County of Peterborough. (1994, consolidated 2013). *County of Peterborough Official Plan*. Peterborough, Ontario. Retrieved from https://www.ptbocounty.ca/en/growing/official-plan.aspx
- County of Peterborough. (2013a). County of Peterborough 2012 Assessment Information. Peterborough, Ontario. Retrieved from http://cms.county.peterborough.on.ca
- County of Peterborough. (2013b). Official Plan: Local township policies. Peterborough, Ontario. Retrieved from https://www.ptbocounty.ca
- County of Peterborough Planning Department. (2013). County of Peterborough Demographic Analysis: 2011 Census. Peterborough, Ontario.
- County of Simcoe. (1998). Official Plan of the County of Simcoe, Consolidated 2008. Midhurst: Ontario.

- County of Simcoe. (2005). Big Bay Point Ontario Municipal Board Hearing Position. Memo from Simcoe Planning Department to Corporate Services Committee, August 10, 2005 Item number: CS-05 204. Midhurst: Ontario.
- County of Simcoe. (2008, modified 2013). Official Plan of the County of Simcoe. Midhurst, Ontario.
- County of Simcoe. (2013). *Midhurst Secondary Plan Update, January 9, 2013*. (Report to Corporate Services Committee, County of Simcoe No. CS 13-007).
- County of Simcoe Governance Committee. (2012). *Governance structure, September 13, 2012*. (No. GOV 12-003).
- Cox, K. R., & McCarthy, J. J. (1982). Neighbourhood activism as a politics of turf: a critical analysis. In K. R. Cox, & R. J. Johnston (Eds.), *Conflict, Politics and the Urban Scene* (pp. 199-219) Longman, Harlow, Essex.
- Cox, R. H. (2001). The social construction of an imperative: Why welfare reform happened in Denmark and the Netherlands but not in Germany. *World Politics*, *53*(3), 463-498.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA, US: Sage Publications.
- Cuadrado-Ciuraneta, S., Durà-Guimerà, A., & Salvati, L. (2016). Not only tourism: unravelling suburbanization, second-home expansion and "rural" sprawl in Catalonia, Spain. *Urban Geography*, 1-24. 10.1080/02723638.2015.1113806
- Curic, T. T., & Bunting, T. E. (2006). Does compatible mean same as?: Lessons learned from the residential intensification of surplus hydro lands in four older suburban neighbourhoods in the City of Toronto. *Canadian Journal of Urban Research*, 15(2), 202-224.
- Dahms, F. (1996). The greying of south Georgian Bay. Canadian Geographer, 40(2), 148-163.
- Dahms, F., & McComb, J. (1999). 'Counterurbanization', interaction and functional change in a rural amenity area a Canadian example. *Journal of Rural Studies*, 15(2), 129-146.
- Dalton, L. C., & Burby, R. J. (1994). Mandates, plans, and planners: building local commitment to development management. *Journal of the American Planning Association*, 60(4), 444-461.

- Davis, A. Y., Pijanowski, B. C., Robinson, K. D., & Kidwell, P. B. (2010). Estimating parking lot footprints in the Upper Great Lakes Region of the USA. *Landscape and Urban Planning*, 96(2), 68-77. 10.1016/j.landurbplan.2010.02.004
- Davis, A. Y., Pijanowski, B. C., Robinson, K., & Engel, B. (2010). The environmental and economic costs of sprawling parking lots in the United States. *Land use Policy*, 27(2), 255-261. 10.1016/j.landusepol.2009.03.002
- Day, J. C., Gunton, T. I., & Albert, K. H. (2003). Achieving effective implementation: An evaluation of a collaborative land use planning process. *Environments*, 31(3), 51-68.
- de Neufville, J. I., & Barton, S. E. (1987). Myths and the definition of policy problems: An exploration of home ownership and public-private partnerships. *Policy Sciences*, 20(3), 181-206. 10.2307/4532112
- de Vries, J. (2015). Planning and culture unfolded: The cases of Flanders and the Netherlands. *European Planning Studies*, 23(11), 2148-2164. 10.1080/09654313.2015.1018406
- Dear, M. (1992). Understanding and overcoming the NIMBY syndrome. *Journal of the American Planning Association*, 58(3), 288.
- Delbridge, R., & Edwards, T. (2007). Reflections on developments in institutional theory: Toward a relational approach. *Scandinavian Journal of Management*, 23(2), 191-205.
- deLeon, P., & deLeon, L. (2002). What ever happened to policy implementation? An alternative approach. *Journal of Public Administration Research & Theory*, 12(4), 467.
- Dennis, R. (2000). 'Zoning' before zoning: The regulation of apartment housing in early twentieth century Winnipeg and Toronto. *Planning Perspectives*, 15(3), 267-299.
- Desfor, G., Keil, R., Kipfer, S., & Wekerly, G. (2006). From surf to turf: No limits to growth in Toronto? *Studies in Political Economy*, (77), 131-155.
- DiGaetano, A., & Strom, E. (2003). Comparative urban governance: An integrated approach. *Urban Affairs Review*, 38(3), 356-395. 10.1177/1078087402238806
- Dillon Consulting Limited. (2006a). Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Existing Capacities Assessment Communities Report. Toronto, Ontario.

- Dillon Consulting Limited. (2006b). *Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Growth Potentials Assessment Report*. Toronto, Ontario.
- Dilworth, R., & Stokes, R. (2013). Green growth machines, LEED ratings and value free development: the case of the Philadelphia property tax abatement. *Journal of Urbanism*, 6(1), 37-51.
- Dodman, D. (2009). Blaming cities for climate change? An analysis of urban greenhouse gas emissions inventories. *Environment and Urbanization*, 21(1), 185-201. 10.1177/0956247809103016
- Dolnick, S. (2012, July 12). Plan to remove Bronx expressway gains traction. *New York Times*, p. A18. Retrieved from: http://www.nytimes.com
- Downs, A. (1992). Growth management: Satan or savior? Regulatory barriers to affordable housing. Journal of the American Planning Association, 58(4), 419.
- Downs, A. (2005). Smart growth Why we discuss it more than we do it. *Journal of the American Planning Association*, 71(4), 367-378.
- Doyle, V. (2009, Sept 26). Letter to Ontario Growth Secretariat, Ministry of Infrastructure regarding proposed Amendment 1 to the Growth Plan for the Greater Golden Horseshoe. Retrieved from https://www.scribd.com/document/166594083/Victor-Doyle-Letter
- Dunse, N., Thanos, S., & Bramley, G. (2013). Planning policy, housing density and consumer preferences. *Journal of Property Research*, 30(3), 221-238. 10.1080/09599916.2013.795992
- Eagle, G. (2010, June 7). Cavan Monaghan's draft Official Plan would scale back residential development in Fraserville. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Edwards, G. C. (1984). Public policy implementation. In G. C. Edwards (Ed.), (pp. ix-xv). Greenwich, Conn.: JAI Press.
- Edwards, M. M., & Haines, A. (2007). Evaluating smart growth Implications for small communities. *Journal of Planning Education and Research*, 27(1), 49-64.
- Eidelman, G., & Taylor, Z. (2010). Canadian urban politics: Another "black hole"? *Journal of Urban Affairs*, 32(3), 305-320.

- Eidelman, G. (2010). Managing urban sprawl in Ontario: Good policy or good politics? *Politics & Policy*, 38(6), 1211-1236. 10.1111/j.1747-1346.2010.00275.x
- Ekers, M., Hamel, P., & Keil, R. (2012). Governing suburbia: Modalities and mechanisms of suburban governance. *Regional Studies*, 46(3), 405-422. 10.1080/00343404.2012.658036
- Ellis, K. (2012). Report to Cavan Monaghan Council Official Plan Update, March 21, 2012. (No. Planning 2012-12). Cavan Monaghan, Ontario.
- Ellis, G. (2004). Discourses of objection: Towards an understanding of third-party rights in planning. *Environment and Planning A*, 36(9), 1549-1570.
- English, J. (2011, July). Kitchener meets its Waterloo: Canada's old 'German capital' is once again learning the art—and politics—of reinvention. *MacLean's*. Retrieved from http://www.macleans.ca
- Evenhuis, E. (2017). Institutional change in cities and regions: a path dependency approach. *Cambridge Journal of Regions, Economy and Society*, 10(3), 509–526.
- Environmental Commissioner of Ontario. (2011a). Land Use Planning in Ontario: Recommendations of the Environmental Commissioner of Ontario from 2000-2010. Toronto: The Queen's Printer for Ontario.
- Environmental Commissioner of Ontario. (2011b). Tapping into the Oak Ridges Moraine. *Engaging Solutions ECO Annual Report*, 2010/11 (pp. 120-122). Toronto: The Queen's Printer for Ontario.
- Environmental Commissioner of Ontario. (2015). *Media release: Commissioner Questions Growth Plan's Effectiveness, Oct* 7, 2015. Toronto: The Queen's Printer for Ontario.
- Ernste, H. (2012). Framing cultures of spatial planning. *Planning Practice & Research*, 27(1), 87-101. 10.1080/02697459.2012.661194
- Ewing, R., Pendall, R., & Chen, D. (2002). *Measuring sprawl and its impact*. Washington, DC: Smart Growth America.
- Ewing, R., & Rong, F. (2008). The impact of urban form on U.S. residential energy use. *Housing Policy Debate*, 19(1), 1-30.

- Ewing, R., Hamidi, S., & Nasar, J. L. (2015). Compactness versus sprawl. *Journal of Planning Literature*, 30(4), 413-432. 10.1177/0885412215595439
- Fainstein, S. (1986). Restructuring the city: The political economy of urban redevelopment (Rev. ed.). New York: Longman.
- Fainstein, S. (1991). Promoting economic development Urban planning in the United States and Great Britain. *Journal of the American Planning Association*, *57*(1), 22-33.
- Fainstein, S. (2000). New directions in planning theory. *Urban Affairs Review*, 35(4), 451-478.
- Fanelli, C., & Thomas, M. P. (2011). Austerity, competitiveness and neoliberalism redux. *Socialist Studies*, 7(1/2), 141-170.
- Farris, J. T. (2001). The barriers to using urban infill development to achieve smart growth. *Housing Policy Debate*, 12(1), 1-30.
- Fasenfest, D., Ciancanelli, P., & Reese, L. A. (1997). Value, exchange and the social economy: framework and paradigm shift in urban policy. *International Journal of Urban and Regional Research*, 21(1), 7-22.
- Feiock, R. C., Tavares, A. F., & Lubell, M. (2008). Policy instrument choices for growth management and land use regulation. *Policy Studies Journal*, *36*(3), 461-480.
- Feldman, S., Lewis, P., & Schiff, R. (2012). Transit-oriented development in the Montreal Metropolitan Region: Developer's perceptions of supply barriers. *Canadian Journal of Urban Research*, 21(2), 25-44.
- Fernández-Alles, M. D. L. L., & Llamas-Sánchez, R. (2008). The neoinstitutional analysis of change in public services. *Journal of Change Management*, 8(1), 3-20. 10.1080/14697010801937416
- Filion, P. (2003). Towards smart growth? The difficult implementation of alternative to urban dispersion. Canadian Journal of Urban Research, 12, 48-70.
- Filion, P. (2010a). The public metropolis: The political dynamics of urban expansion in the Toronto Region, 1924-2003. *Urban Studies*, 47(4), 915-916.

- Filion, P. (2010b). Reorienting urban development? Structural obstruction to new urban forms. International Journal of Urban and Regional Research, 34(1), 1-19. 10.1111/j.1468-2427.2009.00896.x
- Filion, P., Bunting, T., Pavlic, D., & Langlois, P. (2010). Intensification and sprawl: residential density trajectories in Canada's largest metropolitan regions. *Urban Geography*, 31(4), 541-569.
- Filion, P., & Hammond, K. (2009). When planning fails: Downtown malls in mid-size cities. *Canadian Journal of Urban Research*, 17(2), 1-27.
- Filion, P., Hoernig, H., Bunting, T., & Sands, G. (2004). The successful few: Healthy downtowns of small metropolitan regions. *Journal of the American Planning Association*, 70(3), 328-343.
- Filion, P., & Kramer, A. (2011). Metropolitan-scale planning in Neo-liberal times: Financial and political obstacles to urban form transition. *Space and Polity*, 15(3), 197-212.
- Filion, P., & McSpurren, K. (2007). Smart Growth and development reality: The difficult co-ordination of land use and transport objectives. *Urban Studies*, 44(3), 501-523. 10.1080/00420980601176055
- Fischel, W. A. (2004). An economic history of zoning and a cure for its exclusionary effects. *Urban Studies*, 41(2), 317-340.
- Fischer, F. (2003). *Reframing public policy: Discursive politics and deliberative practices*. Oxford: Oxford University Press.
- Fischler, R. (2000). Communicative planning theory: A Foucauldian assessment. *Journal of Planning Education and Research*, 19(4), 358-368.
- Fishman, R. (2000). The death and life of American regional planning. In B. Katz (Ed.), *Reflections on regionalism*. Washington, D.C.: Brookings Institution Press.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245.
- Frank, S. (2013, Nov 13). Our great debate: The parkway extension. *Peterborough this Week*. Retrieved from: https://www.mykawartha.com/

- Frank, K. I., & Hibbard, M. (2017). Rural planning in the twenty-first century: Context-appropriate practices in a connected world. *Journal of Planning Education and Research*, *37*(3), 299-308. 10.1177/0739456X16655599
- Frank, K. I., & Reiss, S. A. (2014). The rural planning perspective at an opportune time. *Journal of Planning Literature*, 29(4), 386-402. 10.1177/0885412214542050
- Frenkel, A., & Orenstein, D. E. (2012). Can urban growth management work in an era of political and economic change? *Journal of the American Planning Association*, 78(1), 16-33. 10.1080/01944363.2011.643533
- Friedmann, J. (1967). A conceptual model for the analysis of planning behavior. *Administrative Science Quarterly*, 12(2), 225-252.
- Friedmann, J. (2005). Globalization and the emerging culture of planning. *Progress in Planning*, 64(3), 183-234. 10.1016/j.progress.2005.05.001
- Garreau, J. (1991). *Edge city: life on the new frontier*. New York: Doubleday.
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, *39*(4), 495-510. 10.1016/j.respol.2010.01.022
- Gerber, J. (2016). The managerial turn and municipal land-use planning in Switzerland evidence from practice. *Planning Theory & Practice*, 17(2), 192-209. 10.1080/14649357.2016.1161063
- Getimis, P. (2012). Comparing spatial planning systems and planning cultures in Europe. The need for a multi-scalar approach. *Planning Practice & Research*, 27(1), 25-40. 10.1080/02697459.2012.659520
- Ghitter, G., & Smart, A. (2009). Mad cows, regional governance, and urban sprawl: Path dependence and unintended consequences in the Calgary region. *Urban Affairs Review*, 44(5), 617-644. 10.1177/1078087408325257
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Cambridge: Polity Press.

- Gieryn, T. F. (2000). A space for place in sociology. *Annual Review of Sociology*, 26(1), 463-496. 10.1146/annurev.soc.26.1.463
- Gilbert, L., Wekerle, G. R., & Sandberg, L. A. (2005). Local responses to development pressures: Conflictual politics of sprawl and environmental conservation. *Cahiers De Geographie Du Quebec*, 49(138), 377-392.
- Gill, A. (2000). From growth machine to growth management: The dynamics of resort development in Whistler, British Columbia. *Environment and Planning A*, 32(6), 1083-1103.
- Gillmor, D. (2012). The invention of Waterloo. The Walrus, 9(1), 44-49.
- Göçmen, Z. A., & LaGro, J. A. (2016). Assessing local planning capacity to promote environmentally sustainable residential development. *Journal of Environmental Planning and Management*, 59(8), 1513-1535. 10.1080/09640568.2015.1080673
- Goldberg, M. A., & Mark, J. H. (1985). The roles of government in housing policy A Canadian perspective and overview. *Journal of the American Planning Association*, 51(1), 34-42. 10.1080/01944368508976798
- Golding, S. A. (2012). Rural identities and the politics of planning: The case of a midwestern destination county. *Society & Natural Resources*, 25(10), 1028-1042. 10.1080/08941920.2012.663067
- Gombu, P. (2009a, May 14). Critics slam province for rezoning farmland. *Toronto Star*. Retrieved from https://www.thestar.com/
- Gombu, P. (2009b, Jun 8). Province pushes secret deal for Simcoe. *Toronto Star*, pp. GT.1. Retrieved from https://www.thestar.com/
- Gombu, P. (2009c, Mar 14). Vaughan firm threatens to move 2,500 jobs; Company says it's moving to Manitoba if it can't 'leapfrog' protected Greenbelt to build new plant. *Toronto Star*, pp. GT.1. Retrieved from https://www.thestar.com
- González, S., & Healey, P. (2005). A sociological institutionalist approach to the study of innovation in governance capacity. *Urban Studies*, 42(11), 2055-2069. 10.1080/00420980500279778

- Gosnell, H., Kline, J. D., Chrostek, G., & Duncan, J. (2011). Is Oregon's land use planning program conserving forest and farm land? A review of the evidence. *Land use Policy*, 28(1), 185-192. 10.1016/j.landusepol.2010.05.012
- Grant, J. (2009). Theory and practice in planning the suburbs: Challenges to implementing new urbanism, smart growth, and sustainability principles. *Planning Theory & Practice*, 10(1), 11-33. 10.1080/14649350802661683
- Growth communities hope to work together. (2009, Aug 25). *Alliston Herald*. Retrieved from https://www.simcoe.com
- Gunder, M. (2010). Planning as the ideology of (neoliberal) space. *Planning Theory*, 9(4), 298-314. 10.1177/1473095210368878
- Guy, S., & Henneberry, J. (2000). Understanding urban development processes: Integrating the economic and the social in property research. *Urban Studies*, *37*(13), 2399-2416.
- Halfacree, K. (2012). Heterolocal Identities? Counter-urbanisation, second homes, and rural consumption in the era of mobilities. *Population, Space and Place, 18*(2), 209-224.
- Hall, C. M. (2015). Second homes planning, policy and governance. *Journal of Policy Research in Tourism, Leisure and Events*, 7(1), 1-14. 10.1080/19407963.2014.964251
- Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative Politics*, 25(3), pp. 275-296.
- Hall, P. A. (2009). Historical institutionalism in rationalist and sociological perspective. In J. Mahoney, & K. Thelen (Eds.), *Explaining institutional change: Ambiguity, agency, and power* (pp. 204-223) 10.1017/CBO9780511806414
- Hall, P. A., & Taylor, R. C. R. (1996). Political science and the three new institutionalisms. *Political Studies*, 44(5), 936-957.
- Halleux, J., Marcinczak, S., & van der Krabben, E. (2012). The adaptive efficiency of land use planning measured by the control of urban sprawl. The cases of the Netherlands, Belgium and Poland. *Land use Policy*, 29(4), 887-898.

- Hamedinger, A. (2014). The mobility and/or fixity of urban and planning policies The role of divergent urban planning cultures. *European Spatial Research and Policy*, 21(1), 23-27.
- Handy, S. (2005). Smart growth and the transportation-land use connection: What does the research tell us? *International Regional Science Review*, 28(2), 146-167.
- Hanes, T. (2011, Summer) Open for business. *Ontario Home Builder*. Retrieved from https://www.ohba.ca/magazine
- Harding, A. (1995). Elite theory and growth machines. In D. Judge, G. Stoker & H. Wolman (Eds.), *Theories of urban politics* (pp. 35-53). Thousand Oaks, California: Sage Publications Inc.
- Harris, R. (2000). More American than the United States: Housing in urban canada in the twentieth century. *Journal of Urban History*, 26(4), 456-478.
- Harris, R. (2004). *Creeping conformity: How Canada became suburban, 1900-1960.* Toronto; Buffalo: University of Toronto Press.
- Harris, R., & Lehman, M. (2001). Social and geographic inequities in the residential property tax: A review and case study. *Environment and Planning A*, 33(5), 881-900.
- Harris, R., & Shulist, T. (2001). Canada's reluctant housing program: The Veterans' Land Act, 1942-75. The Canadian Historical Review, 82(2), 253-282.
- Harris, R. (2009). The birth of the housing consumer in the United States, 1918–1960. *International Journal of Consumer Studies*, 33(5), 525-532. 10.1111/j.1470-6431.2009.00797.x
- Haselsberger, B., & Hamedinger, A. (2014). Debating planning cultures: Austrian researchers in conversation with John Friedmann. *European Spatial Research and Policy*, 21(1), 5-10. 10.2478/esrp-2014-0001
- Hawkins, C. V. (2011). Smart Growth policy choice: A resource dependency and local governance explanation. *Policy Studies Journal*, 39(4), 679-707.
- Hawkins, C. V. (2014). Planning and competing interests: Testing the mediating influence of planning capacity on smart growth policy adoption. *Journal of Environmental Planning and Management*, 57(11), 1683-1703.

- Healey, P. (1992). Planning through debate: The communicative turn in planning theory. *Town Planning Review*, 63(2), 143-162.
- Healey, P. (2003). Collaborative planning in perspective. *Planning Theory*, 2(2), 101-123. 10.1177/14730952030022002
- Healey, P. (2005). On the project of 'institutional transformation' in the planning field: Commentary on the contributions. *Planning Theory*, 4(3), 301-310. 10.1177/1473095205058498
- Healey, P. (2007). The new institutionalism and the transformative goals of planning. In N. Verma (Ed.), *Institutions and planning* (pp. 61-89). Amsterdam; Boston: Elsevier.
- Healey, P., & Barrett, S. (1990). Structure and agency in land and property development processes: Some ideas for research. *Urban Studies*, 27(1), 89-103. 10.1080/00420989020080051
- Hemson Consulting Ltd. (2004). Population, Households & Employment Forecasts Update. Toronto, Ontario.
- Hemson Consulting Ltd. (2009). Growth management strategy land inventory and capacity analysis, Cambridge. Toronto, Ontario.
- Henneberry, J., & Parris, S. (2013). The embedded developer: Using project ecologies to analyse local property development networks. *Town Planning Review*, 84(2), 227-249.
- Hess, P. M., & Sorensen, A. (2015). Compact, concurrent, and contiguous: Smart growth and 50 years of residential planning in the Toronto region. *Urban Geography*, 36(1), 127-151.
- Heurkens, E., Adams, D., & Hobma, F. (2015). Planners as market actors: The role of local planning authorities in the UK's urban regeneration practice. *The Town Planning Review*, 86(6), 625-650.
- Hill, M. J., & Hupe, P. (2009). *Implementing public policy: An introduction to the study of operational governance* (2nd ed.). Thousand Oaks, California: Sage Publications Inc.
- Hill, H. C. (2003). Understanding implementation: Street-level bureaucrats' resources for reform. *Journal of Public Administration Research and Theory*, 13(3), 265-282. 10.1093/jpart/mug024

- Hommels, A. (2005a). Studying obduracy in the city: Toward a productive fusion between technology studies and urban studies. *Science Technology and Human Values*, 30(3), 323-351.
- Hommels, A. (2005b). *Unbuilding cities: Obduracy in urban socio-technical change*. Cambridge, Mass.: MIT Press.
- Howell-Moroney, M. (2007). Studying the effects of the intensity of US State growth management approaches on land development outcomes. *Urban Studies*, 44(11), 2163-2178.
- Howley, P. (2009). Attitudes towards compact city living: Towards a greater understanding of residential behaviour. *Land use Policy*, 26(3), 792-798. 10.1016/j.landusepol.2008.10.004
- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. 10.1177/1049732305276687
- Hulchanski, J. D. (1986). The 1935 Dominion Housing Act: Setting the stage for a permanent Federal presence in Canada's housing sector. *Urban History Review*, *15*(1), 19-39.
- Hulchanski, J. D. (2006). What factors shape Canadian housing policy? The intergovernmental role in Canada's housing system. In R. Young, & C. Leuprecht (Eds.), *Canada: the state of the federation 2004: Municipal-federal-provincial relations in Canada* (pp. 247). Montreal, Quebec: McGill-Queen's University Press.
- Hunt, M. (2009). Report to City of Peterborough planning committee re: Growth Plan for the Greater Golden Horseshoe. (Report PLPD09-018). Peterborough, Ontario.
- Hupe, P. (2011). The thesis of incongruent implementation: revisiting Pressman and Wildavsky. *Public Policy and Administration*, 26(1), 63-80. 10.1177/0952076710367717
- Hymel, K. (2009). Does traffic congestion reduce employment growth? *Journal of Urban Economics*, 65(2), 127-135.
- Ingram, G. K., Carbonell, A., Hong, Y., & and Flint, A. (Eds.). (2009). *Smart growth policies: an evaluation of programs and outcomes*. Cambridge, MA: Lincoln Institute of Land Policy.
- Innés, J. E., & Booher, D. E. (1999). Consensus building and complex adaptive systems a framework for evaluating collaborative planning. *Journal of the American Planning Association*, 65(4), 412-423.

- Innes, J. E. (1992). Group processes and the social construction of growth management: Florida, Vermont, and New Jersey. *Journal of the American Planning Association, Vol.58, Issue 4, P.440, 58*(4), 440.
- Innes, J. E. (1995). Planning theory's emerging paradigm: Communicative action and interactive practice. *Journal of Planning Education and Research*, 14(3), 183-189. 10.1177/0739456X9501400307
- Innes, J. E. (2004). Consensus building: Clarifications for the critics. *Planning Theory*, *3*(1), 5-20. 10.1177/1473095204042315
- Innes, J. E., & Booher, D. E. (1999). Metropolitan development as a complex system: A new approach to sustainability. *Economic Development Quarterly*, 13(2), 141-156.
- Innisfil presses urban nodes to embrace joint service agreements. (2013). *Essa Township Free Press*. Retrieved from http://www.madhunt.com
- Irwin, E. G., & Bockstael, N. E. (2004). Land use externalities, open space preservation, and urban sprawl. *Regional Science and Urban Economics*, 34(6), 705-725. 10.1016/j.regsciurbeco.2004.03.002
- Isaacson, F. (2009, January 22). County council blasts Growth Plan. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Isaacson, F. (2011, May 4, 2011). Cavan Monaghan scraps Fraserville development plan. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Jackson, T., Gopinath, D., & Curry, J. (2012). Dirigiste and smart growth approaches to urban sprawl: Lessons from Scotland and British Columbia. *Journal of Transatlantic Studies*, 10(1), 45-67.
- Jacobs, H. M. (2010). Social conflict over property rights: The end, a new beginning, or a continuing debate? *Housing Policy Debate*, 20(3), 329-349.
- Jacobs, H. M., & Paulsen, K. (2009). Property rights: The neglected theme of 20th-century American planning. *Journal of the American Planning Association*, 75(2), 134-143. 10.1080/01944360802619721

- Jensen, O. B., & Richardson, T. (2001). Nested visions: New rationalities of space in European spatial planning. *Regional Studies*, 35(8), 703-717. 10.1080/00343400120084696
- Jonas, A. E. G., & Wilson, D. (1999). In A. E. G. Jonas, & D. Wilson (Eds.), *The urban growth machine:* Critical perspectives, two decades later (pp. 3-18). Albany: State University of New York Press.
- Jones, C. (2014). Land use planning policies and market forces: Utopian aspirations thwarted? *Land use Policy*, 38(0), 573-579. http://dx.doi.org.proxy.lib.uwaterloo.ca/10.1016/j.landusepol.2014.01.002
- Joseph, C., Gunton, T. I., & Day, J. C. (2008). Implementation of resource management plans: Identifying keys to success. *Journal of Environmental Management*, 88(4), 594-606.

 10.1016/j.jenvman.2007.03.028
- Kim, J. H., Deal, B., & Chakraborty, A. (2013). Parsing density changes: An outcome-oriented growth management policy analysis. *Journal of Housing and the Built Environment*, 28(3), 529-546.
- Kingdon, J. W. (2003). Agendas, alternatives, and public policies. New York: New York: Longman.
- Knieling, J., & Othengrafen, F. (2015). Planning culture A concept to explain the evolution of planning policies and processes in Europe? *European Planning Studies*, 23(11), 2133-2147. 10.1080/09654313.2015.1018404
- Kondo, M. C., Rivera, R., & Rullman Jr., S. (2012). Protecting the idyll but not the environment: Second homes, amenity migration and rural exclusion in Washington State. *Landscape and Urban Planning*, 106(2), 174-182.
- Koontz, T. M., & Newig, J. (2014). From planning to implementation: Top-down and bottom-up approaches for collaborative watershed management. *Policy Studies Journal*, *42*(3), 416-442. 10.1111/psj.12067
- Kuklick, H. (1980). Chicago sociology and urban planning policy Sociological theory as occupational ideology. *Theory and Society*, *9*(6), 821-845.
- Kushner, J., & Siegel, D. (2003). Effect of municipal amalgamations in Ontario on political representation and accessibility. *Canadian Journal of Political Science/Revue Canadienne De Science Politique*, 36(05), 1035. 10.1017/S0008423903778950

- Lake Simcoe Environmental Management Strategy (LSEMS). (2003). State of the Lake Simcoe watershed. (Lake Simcoe Environmental Management Strategy Report.). Retrieved from https://www.lsrca.on.ca
- Landis, J. D. (2006). Growth management revisited: Efficacy, price effects, and displacement. *Journal of the American Planning Association*, 72(4), 411-430.
- Lapointe Consulting Inc. (2006). Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Existing Capacities Assessment Demographic, Housing and Employment Trends In Barrie, Orillia and Simcoe County. Toronto, Ontario.
- Laurian, L., Day, M., Backhurst, M., Berke, P., Ericksen, N., Crawford, J., Dixon, J., & Chapman, S. (2004a). What drives plan implementation? Plans, planning agencies and developers. *Journal of Environmental Planning and Management*, 47(4), 555-577. 10.1080/0964056042000243230
- Laurian, L., Day, M., Berke, P., Ericksen, N., Backhurst, M., Crawford, J., & Dixon, J. (2004b). Evaluating plan implementation A conformance-based methodology. *Journal of the American Planning Association*, 70(4), 471-480.
- Lecours, A. (2005). *New institutionalism theory and analysis*. Toronto, Ontario: University of Toronto Press.
- Lee, J., & Choi, Y. (2011). What determinants influence the implementation of growth management policy in Colorado? *International Review of Public Administration*, 16(1), 135-156.
- Leibovitz, J. (2003). Institutional barriers to associative city-region governance: The politics of institution-building and economic governance in 'Canada's technology triangle'. *Urban Studies*, 40(13), 2613-2642.
- Leo, C. (1995). Global change and local politics: Economic decline and the local regime in Edmonton. *Journal of Urban Affairs*, 17(3), 277-299. 10.1111/j.1467-9906.1995.tb00348.x
- Leo, C. (1998). Regional growth management regime: The case of Portland, Oregon. *Journal of Urban Affairs*, 20(4), 363-394.
- Leo, C. (2008). The empty space machine: How slow growth exacerbates the ills of sprawl. *Plan Canada*, 48(3), 34-37.

- Leo, C., & Anderson, K. (2006). Being realistic about urban growth. *Journal of Urban Affairs*, 28(2), 169-189.
- Leo, C., Beavis, M. A., Carver, A., & Turner, R. (1998). Is urban sprawl back on the political agenda? Local growth control, regional growth management, and politics. *Urban Affairs Review, 34*(2), 179-212.
- Leo, C., & Brown, W. (2000). Slow growth and urban development policy. *Journal of Urban Affairs*, 22(2), 193-213.
- Lepoutre, J. M. W. N., & Valente, M. (2012). Fools breaking out: The role of symbolic and material immunity in explaining institutional nonconformity. *Academy of Management Journal*, 55(2), 285-313.
- Levine, J. C. (2006). Zoned out: regulation, markets, and choices in transportation and metropolitan land-use. Washington, D.C.: Resources for the Future.
- Levine, J. C., & Inam, A. (2004). The market for transportation-land use integration: Do developers want smarter growth than regulations allow? *Transportation*, 31(4), 409-427.
- Levin-Keitel, M. (2014). Managing urban riverscapes: towards a cultural perspective of land and water governance. *Water International*, 39(6), 842-857. 10.1080/02508060.2014.957797
- Lewis, P. G., & Baldassare, M. (2010). The complexity of public attitudes toward compact development: survey evidence from five states. *Journal of the American Planning Association*, 76(2), 219-237.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public services* (Updated ed.). New York: Russel Sage Foundation.
- Logan, J. R., & Molotch, H. L. (1987). *Urban fortunes: the political economy of place*. Berkeley, California: University of California Press.
- Logan, J. R., & Crowder, K. D. (2002). Political regimes and suburban growth, 1980-1990. *City & Community*, 1(1), 113-135.
- Loh, C. G. (2011). Assessing and interpreting non-conformance in land-use planning implementation. *Planning Practice and Research*, 26(3), 271-287.

- Lopez, R. (2004). Urban sprawl and risk for being overweight or obese. *American Journal of Public Health*, 94(9), 1574-1579. 10.2105/AJPH.94.9.1574
- Lowndes, V. (2009). New institutionalism and urban politics. In J. S. Davies, & D. L. Imbroscio (Eds.), *Theories of Urban Politics* (2nd ed., pp. 91-105). Thousand Oaks, California: Sage Publications Inc.
- Lowndes, V. (2008). Urban politics and institutional theory. In J. Pierre, B. G. Peters & G. Stoker (Eds.), *Debating Institutionalism* (pp. 152-175). New York: Manchester University Press.
- Lowndes, V., & Roberts, M. (Eds.). (2013). Why institutions matter: The new institutionalism in political science. New York, NY: Palgrave MacMillan.
- Lubell, M., Feiock, R. C., & Ramirez de la Cruz, Edgar E. (2009). Local Institutions and the politics of urban growth. *American Journal of Political Science*, *53*(3), 649-665. 10.1111/j.1540-5907.2009.00392.x
- Lyles, W., Berke, P., & Smith, G. (2014). Do planners matter? Examining factors driving incorporation of land use approaches into hazard mitigation plans. *Journal of Environmental Planning and Management*, 57(5), 792-811.
- Lyles, W., Berke, P., & Smith, G. (2016). Local plan implementation: assessing conformance and influence of local plans in the United States. *Environment and Planning B: Planning and Design*, 43(2), 381-400. 10.1177/0265813515604071
- MacLeod, G. (2011). Urban politics reconsidered: Growth machine to post-democratic city? *Urban Studies*, 48(12), 2629-2660.
- Mahoney, J., & Thelen, K. (2009). Explaining institutional change: Ambiguity, agency, and power. (pp. 1-236)10.1017/CBO9780511806414
- Malcolmson, C., & Donnelly, D. (2012, January 31, 2012). Ontario's Growth Plan Amendment for Simcoe County? #Fail. *Huffington Post*. Retrieved from http://www.huffingtonpost.ca/
- March, J. G., & Olsen, J. P. (2009). Elaborating the "new institutionalism". In R. E. Goodin (Ed.), *The Oxford handbook of political science* (pp. 2-20). New York: Oxford University Press.

- Margerum, R. D. (2002). Evaluating collaborative planning: Implications from an empirical analysis of growth management. *Journal of the American Planning Association*, 68(2), 179-193.
- Marquis, G. (2009). Regime or coalition? Power relations and the urban agenda in Saint John, 1950-2000. *Journal of Enterprising Communities*, 3(4), 355-368.
- Mastop, H., & Faludi, A. (1997). Evaluation of strategic plans: the performance principle. *Environment & Planning B: Planning & Design*, 24(6), 815-832.
- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory: J-PART, 5*(2), pp. 145-174.
- May, P. J., & Winter, S. C. (2009). Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of Public Administration Research and Theory*, 19(3), 453-476. 10.1093/jopart/mum030
- McCormick, R. (2011a, January/February). 'Policy over reality': 'Bureaucratic influences' obstructing good planning, County writes to Province. *Ramara Chronicle*, pp. p.6. Retrieved online http://www.ramarachronicle.com/
- McCormick, R. (2011b, January/February). Province called 'BigBrother': Ramara CAO describes provincial approach to planning as 'a top-down dictatorship'. *Ramara Chronicle*, pp. p.7. Retrieved online http://www.ramarachronicle.com/
- McGregor, M., & Spicer, Z. (2016). The Canadian homevoter: Property values and municipal politics in Canada. *Journal of Urban Affairs*, 38(1), 123-139. 10.1111/juaf.12178
- Mehta, D. (2012, May 29). Census 2011: Peterborough, Ontario top choice for retiring Canadians. *Toronto Star*. Retrieved from https://www.thestar.com/
- Meligrana, J. F. (2003). Developing a planning strategy and vision for rural-urban fringe areas: A case study of British Columbia. *Canadian Journal of Urban Research*, 12(1), 119-141.
- Mercier, H., & Landemore, H. (2012). Reasoning is for arguing: Understanding the successes and failures of deliberation. *Political Psychology*, *33*(2), 243-258. 10.1111/j.1467-9221.2012.00873.x

- Meridian Planning Consultants Inc. (2008). *Active transportation plan for the Town of Wasaga Beach*. Vaughan, Ontario.
- Metzger, J. T. (2000). Planned abandonment: The neighborhood life-cycle theory and national urban policy. *Housing Policy Debate*, 11(1), 7-40. 10.1080/10511482.2000.9521359
- Mills, E. S. (2001). Comments on Brueckner, Jan K. Urban sprawl: Lessons from urban economics. *Brookings-Wharton Papers on Urban Affairs*, pp. 65-97. Brookings Institution Press.
- Millward, H. (2006). Urban containment strategies: A case-study appraisal of plans and policies in Japanese, British, and Canadian cities. *Land use Policy*, *23*(4), 473-485. 10.1016/j.landusepol.2005.02.004
- Módenes, J.-A., & López-Colás, J. (2007). Second homes and compact cities in Spain: Two elements of the same system? *Tijdschrift Voor Economische En Sociale Geografie*, 98(3), 325-335.
- Mohl, R. A., & Rose, M. H. (2012). The post-interstate era: Planning, politics, and policy since the 1970s. *Journal of Planning History, 11*(1), 3-7.
- Molotch, H. (1976). The city as a growth machine: Toward a political economy of place. *American Journal of Sociology*, 82(2), 309.
- Moore, S. (2010). 'More Toronto, naturally' but 'too strange for Orangeville': De-universalizing new urbanism in Greater Toronto. *Cities*, *27*(2; SI), 103-113.
- Moore, S. (2012). Re-evaluating 'public' and 'private' in local development cultures: converging vocabularies of public good and market success in Toronto's New Urbanism. *The Town Planning Review*, 83(5), 575-595.
- Moore, S. (2015). Researching local development cultures: Using the qualitative interview as an interpretive lens. *International Planning Studies*, 20(4), 390-406. 10.1080/13563475.2015.1034253
- Moore, T., & Nelson, A. C. (1994). Lessons for effective urban-containment and resource-land-preservation policy. *Journal of Urban Planning and Development, 120*, 157-171.
- Moroney, M. E. (2008). A mixed method look at state growth management policy. *The American Review of Public Administration*, 38(3), 339-361. 10.1177/0275074007310556

- Morris, Z. S. (2009). The truth about interviewing elites. *Politics*, 29(3), 209-217. 10.1111/j.1467-9256.2009.01357.x
- Moulaert, F., Martinelli, F., González, S., & Swyngedouw, E. (2007). Introduction: Social innovation and governance in European cities: Urban development between path dependency and radical innovation. *European Urban and Regional Studies*, 14(3), 195-209.
- Muller, P. O. (2004). Stages in the spatial evolution of the American metropolis. In S. Hanson (Ed.), *The Geography of Urban Transportation*. New York: The Guilford Press.
- Mumford, L. (2003). What is a city? In R. T. LeGates, & F. Stout (Eds.), *The City Reader* (3rd ed., pp. 92-96). London; New York: Routledge.
- Murdoch, J., & Lowe, P. (2003). The preservationist paradox: modernism, environmentalism and the politics of spatial division. *Transactions of the Institute of British Geographers*, 28(3), 318-332. 10.1111/1475-5661.00095
- Natural Capital Resources Inc. (2012). Facing Our Fiscal Challenges A Report on the Financial Sustainability of Local Government in Eastern Ontario. Sydenham: Eastern Ontario Warden's Caucus.
- Nechyba, T. J., & Walsh, R. P. (2004). Urban Sprawl. *The Journal of Economic Perspectives, 18*(4), pp. 177-200.
- Nelson, A. C., & Moore, T. (1996). Assessing growth management policy implementation: Case study of the United States' leading growth management state. *Land use Policy*, *13*, 241-259.
- Neptis Foundation. (2016). Province must embrace its role as regional planner for Growth Plan to succeed. Retrieved from http://www.neptis.org/
- Neptis Foundation. (2017, March 9). Should rural settlements in the Greater Golden Horseshoe be a focus for growth? Retrieved from http://www.neptis.org/
- Newman, P., & Kenworthy, J. (2000). The ten myths of automobile dependence. *World Transport Policy & Practice*, 6(1), 15-25.

- Noland, R. B., Weiner, M. D., DiPetrillo, S., & Kay, A. I. (2017). Attitudes towards transit-oriented development: Resident experiences and professional perspectives. *Journal of Transport Geography*, 60, 130-140. 10.1016/j.jtrangeo.2017.02.015
- Nopper, P. (2013, July). *Township of Cavan Monaghan Downtown Millbrook Revitalization Strategy*. Millbrook, Ontario: Township of Cavan Monoghan.
- Norman, J., MacLean, H. L., & Kennedy, C. A. (2006). Comparing high and low residential density: Lifecycle analysis of energy use and greenhouse gas emissions. *Journal of Urban Planning and Development*, 132(1), 10-21.
- Norton, R. K. (2005a). Local commitment to state-mandated planning in coastal North Carolina. *Journal of Planning Education and Research*, 25(2), 149-171.
- Norton, R. K. (2005b). More and better local planning: State-mandated local planning in coastal North Carolina. *Journal of the American Planning Association*, 71(1), 55-468.
- O'Connell, L. (2008). Exploring the social roots of smart growth policy adoption by cities. *Social Science Quarterly*, 89(5), 1356-1372.
- O'Connell, L. (2009). The impact of local supporters on smart growth policy adoption. *Journal of the American Planning Association*, 75(3), 281-291.
- Oliveira, V., & Pinho, P. (2011). Bridging the gap between planning evaluation and programme evaluation: The contribution of the PPR methodology. *Evaluation*, 17(3), 293-307.
- Oliveira, V., & Pinho, P. (2010). Evaluation in urban planning: Advances and prospects. *Journal of Planning Literature*, 24(4), 343-361. 10.1177/0885412210364589
- OMB approves Peterborough annexation bid. (1962, Oct 12). *The Globe and Mail*, pp. 36. Retrieved online https://www.theglobeandmail.com/
- Ontario Ministry of Energy and Infrastructure (MEI). (2007). McGuinty government wins major provincial planning awards: New award category recognizes importance of Growth Plan and Greenbelt. Toronto: Queen's Printer for Ontario. Retrieved from http://www.placestogrow.ca/

- Ontario Ministry of Energy and Infrastructure (MEI). (2009). Simcoe Area: A Strategic Vision for Growth. Toronto: Queen's Printer for Ontario.
- Ontario Ministry of the Environment and Climate Change. (2010). *Lake Simcoe Phosphorus Reduction Strategy*. Toronto: Queen's Printer for Ontario.
- Ontario Ministry of Finance. (2016). *Ontario Population Projections Update, 2015–2041*. Toronto: Queen's Printer for Ontario.
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2005, May 24). Letter from MMAH to County of Simcoe re: Proposed County OPA for Big Bay Point Resort Community.
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2005, March 10). *Province Helps Simcoe County Plan for the Future* [Press release]. Retrieved from https://news.ontario.ca
- Ontario Ministry of Infrastructure (MI). (2006). Greater Golden Horseshoe Growth Plan Wins Prestigious U.S. Award. Toronto: Queen's Printer for Ontario. Retrieved from https://news.ontario.ca
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2011, October 28). Letter re: Appeal to the Ontario Municipal Board County of Simcoe approval of Official Plan Amendment No. 38 for the Township of Springwater.
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2012, November 28). Letter to OMB re: appeal to the Ontario Municipal Board Township of Springwater Official Plan Amendment No. 38, OMB No.: PL111181.
- Ontario Ministry of Infrastructure (MI). (2012). Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, 2006: Simcoe Sub-Area Amendment. Toronto: Queen's Printer for Ontario.
- Ontario Ministry of Infrastructure (MI). (2013, February 14). Municipal Official Plan Status. Retrieved from https://www.placestogrow.ca
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2013, June 2013). Places to Grow Better Choices. Brighter Future: Growth Plan for the Greater Golden Horseshoe, Order-in-Council No 1221/2006, Approved by the Lieutenant Governor in Council, CanadaCong. (2006). Toronto: Queen's Printer for Ontario. Retrieved from http://www.placestogrow.ca

- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2013a). Amendment 2 to the Growth Plan for the Greater Golden Horseshoe, 2006, Order-in-Council No 767/2013, Approved by the Lieutenant Governor in Council, CanadaCong. Toronto: Queen's Printer for Ontario. Retrieved from https://www.placestogrow.ca
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2013b). Municipal restructuring activity summary table. Retrieved from http://www.mah.gov.on.ca
- Ontario Ministry of Municipal Affairs and Housing (MMAH). (2017). Growth Plan for the Greater Golden Horseshoe, Order-in-Council No 1024/2017, Approved by the Lieutenant Governor in Council, Canada Cong. Toronto: Queen's Printer for Ontario. Retrieved from https://www.placestogrow.ca
- Ontario Ministry of Municipal Affairs and Housing (MMAH), & Ministry of Natural Resources and Forestry (MNRF). (2015). Planning for Health, Prosperity and Growth in the Greater Golden Horseshoe: 2015-2041. Recommendations of the Advisory Panel on the Coordinated Review of the Growth Plan for the Greater Golden Horseshoe, the Greenbelt Plan, the Oak Ridges Moraine Conservation Plan and the Niagara Escarpment Plan. Toronto, Ontario: Queen's Printer for Ontario.
- Ontario Municipal Board. (2007, December 14). OMB hearing: Big Bay Point development proposal appeal and decision. OMB No. PL050290.
- Ontario Municipal Board. (2009, August 7). OMB hearing: Failure of Council of the County of Simcoe to announce a decision respecting proposed Official Plan Amendment no. 15. OMB No. PL071221.
- Ontario Municipal Board. (2013, Jan 21). OMB hearing: New Region of Waterloo Official Plan. OMB No. PL110080.
- Othengrafen, F., & Reimer, M. (2013). The embeddedness of planning in cultural contexts: Theoretical foundations for the analysis of dynamic planning cultures. *Environment and Planning A*, 45(6), 1269-1284.
- Othengrafen, F. (2010). Spatial planning as expression of culturised planning practices: The examples of Helsinki, Finland and Athens, Greece. *Town Planning Review*, 81(1), 83-110.

- O'Toole, L. J. J. (1986). Policy recommendations for multi-actor implementation: An assessment of the field. *Journal of Public Policy*, 6(2), pp. 181-210.
- O'Toole, L. J. J. (2000). Research on policy implementation: Assessment and prospects. *Journal of Public Administration Research and Theory*, 10(2), 263-288.
- Pacione, M. (2013). Private profit, public interest and land use planning A conflict interpretation of residential development pressure in Glasgow's rural—urban fringe. *Land use Policy*, *32*, 61-77. 10.1016/j.landusepol.2012.09.013
- Padeiro, M. (2016). Conformance in land-use planning: The determinants of decision, conversion and transgression. *Land use Policy*, 55, 285-299. 10.1016/j.landusepol.2016.04.014
- Palmer, M. E., Winter, J. G., Young, J. D., Dillon, P. J., & Guildford, S. J. (2011). Introduction and summary of research on Lake Simcoe: Research, monitoring, and restoration of a large lake and its watershed. *Journal of Great Lakes Research*, *37*(SUPPL. 3), 1-6.
- Patterson, C. (2011, January 28). Letter to Bob Chiarelli Re: Proposed Growth Plan Amendment 1 to the Growth Plan for the Greater Golden Horseshoe.
- Patton, M. Q. (2002). Qualitative interviewing. *Qualitative research and evaluation methods* (3rd ed., pp. 339-367). Thousand Oaks, California: Sage Publications Inc.
- Paulsen, K. (2013). The effects of growth management on the spatial extent of urban development, revisited. *Land Economics*, 89(2), 193-210.
- Peck, J. (2011). Neoliberal suburbanism: Frontier space. Urban Geography, 32(6), 884-919.
- Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode*, 34(3), 380-404.
- Pendall, R. (1999). Do land-use controls cause sprawl? *Environment and Planning B: Planning and Design*, 26(4), 555-571.
- Pender, T. (2013, August 15). OMB decision undermines region's authority, prof says. *Waterloo Record*. Retrieved from https://www.therecord.com

- Pentikainen, P., & Brunger, A. G. (2010). Ontario Lottery Gaming (OLG) Corporation Gaming Revenues and municipally-inspired urban development in a traditionally rural Ontario township: The case of Cavan Monaghan. In K. B. Beesley (Ed.), *The Rural-urban fringe in Canada: Conflict and controversy* (pp. 251-268). Brandon: Rural Development Institute.
- Persky, J., & Kurban, H. (2003). Do federal spending and tax policies build cities or promote sprawl? *Regional Science and Urban Economics*, 33(3), 361-378.
- Pflieger, G., Kaufmann, V., Pattaroni, L., & Jemelin, C. (2009). How does urban public transport change cities? Correlations between past and present transport and urban planning policies. *Urban Studies*, 46(7), 1421-1437.
- Pierre, J., Peters, B. G., & Peters, B. G. (Eds.). (2008). *Debating institutionalism*. New York: Manchester University Press.
- Pierre, J. (1999). Models of Urban Governance. *Urban Affairs Review*, *34*(3), 372-396. 10.1177/10780879922183988.
- Pierson, P. (2000). Increasing returns, path dependence, and the study of politics. *The American Political Science Review*, 94(2), pp. 251-267.
- Pigg, S. (June 5, 2015). Why Toronto's crazy house prices are pushing homeowners into Kitchener, Barrie. *Toronto Star*. Retrieved from https://www.thestar.com
- Pissourios, I. A. (2014). Top-down and bottom-up urban and regional planning: Towards a framework for the use of planning standards. *European Spatial Research and Policy*, 21(1), 83-99.
- Planning Department, County of Simcoe. (2011). *Transit Initiatives Status (Update). Report to Corporate Services Committee.* (No. CS 11-160). Midhurst, Ontario.
- Pond, D. (2009). Ontario's Greenbelt: Growth management, farmland protection, and regime change in southern Ontario. *Canadian Public Policy*, *35*(4), 413-432.
- Powell, W. W., & DiMaggio, P. (1991). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.

- Pressman, J. L., & Wildavsky, A. (1984). Implementation: How great expectations in Washington are dashed in Oakland: or, why it's amazing that federal programs work at all, this being a saga of the Economic Development Administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes. Berkeley: University of California Press.
- Prior, B. (2010). Property taxes a brownfield challenge. Ontario Planning Journal, 25(1).
- Putnam, R. D. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.
- Qviström, M. (2012). Contested landscapes of urban sprawl: Landscape protection and regional planning in Scania, Sweden, 1932–1947. *Landscape Research*, 37(4), 399-415. 10.1080/01426397.2012.687445
- Qviström, M., & Cadieux, K. V. (2012). Spatial order, scenic landscapes and sprawl: Peri-urban studies at the interface between landscape and planning history. *Landscape Research*, 37(4), 395-398. 10.1080/01426397.2012.692776
- Radeloff, V. C., Hammer, R. B., & Stewart, S. I. (2005). Rural and suburban sprawl in the U.S. Midwest from 1940 to 2000 and its relation to forest fragmentation. *Conservation Biology*, 19(3), 793-805.
- Ramirez de la Cruz, E. (2009). Local political institutions and smart growth: An empirical study of the politics of compact development. *Urban Affairs Review*, 45(2), 218-246.
- Region of Waterloo. (2003). *Planning our Future: Regional Growth Management Strategy*. Kitchener, Ontario. Retrieved from https://www.regionofwaterloo.ca
- Region of Waterloo. (2015). Regional Official Plan Background to the settlement between the Region of Waterloo and appellants, Report PDL-15-03. Kitchener, Ontario. Retrieved from https://www.regionofwaterloo.ca
- Regional Municipality of York. (2008). Staff comments on Simcoe County's draft Official Plan. Report No. 11 of the Planning and Economic Development Committee for Regional Council. Newmarket, Ontario.
- Regional Municipality of York. (2015). Staff comments on 2015 Coordinated Review of the Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan and Oak Ridges Moraine Conservation

- Plan. Report No. 1 of the Commissioner of Corporate Services and Chief Planner, to York Regional Council, May 21, 2015. Newmarket, Ontario.
- Reimer, M. (2013). Planning cultures in transition: Sustainability management and institutional change in spatial planning. *Sustainability (Switzerland)*, *5*(11), 4653-4673.
- Reimer, M., & Blotevogel, H. H. (2012). Comparing spatial planning practice in Europe: A plea for cultural sensitization. *Planning Practice & Research*, 27(1), 7-24. 10.1080/02697459.2012.659517
- Residents speak out on proposed Millbrook subdivision. (2015, Mar 31). *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Richardson, T., & Jensen, O. (2003). Linking discourse and space: Towards a cultural sociology of space in analysing spatial policy discourses. *Urban Studies*, 40(1), 7-22. 10.1080/00420980220080131.
- Robertson, D., McIntosh, I., & Smyth, J. (2010). Neighbourhood identity: The path dependency of class and place. *Housing, Theory and Society*, 27(3), 258-273. 10.1080/14036090903326429.
- Rosen, G. (2017). Toronto's condo-builders: development approaches and spatial preferences. *Urban Geography*, 38(4), 606-625. 10.1080/02723638.2016.1179426
- Sabatier, P. (1986). Top-down and bottom-up approaches to implementation research: A critical analysis and suggested synthesis. *Journal of Public Policy*, *6*(1), pp. 21-48.
- Sabatier, P., & Mazmanian, D. (1979). The conditions of effective implementation: A guide to accomplishing policy objectives. *Policy Analysis*, 5(4), 481-504.
- Saetren, H. (2005). Facts and myths about research on public policy implementation: Out-of-fashion, allegedly dead, but still very much alive and relevant. *Policy Studies Journal*, *33*(4), 559-582. 10.1111/j.1541-0072.2005.00133.x.
- Sager, T. (2009). Planners' role: Torn between dialogical ideals and neo-liberal realities. *European Planning Studies*, 17(1), 65-84.
- Sager, T. (2011). Neo-liberal urban planning policies: A literature survey 1990-2010. *Progress in Planning*, 76(4), 147-199.

- Sánchez, J. M. T., & Maseda, R. C. (2016). Forcing and avoiding change. Exploring change and continuity in local land-use planning in Galicia (Northwest of Spain) and the Netherlands. *Land use Policy*, *50*, 74-82. 10.1016/j.landusepol.2015.09.006
- Sancton, A. (2005). The governance of metropolitan areas in Canada. *Public Administration and Development*, 25(4), 317-327.
- Sandercock, L. (2005). Picking the paradoxes: A historical anatomy of Australian planning cultures. In B. Sanyal (Ed.), *Comparative planning cultures* (pp. 309-330). New York: Routledge.
- Sanyal, B. (Ed.). (2005). Comparative planning cultures. New York: Routledge.
- Schein, E. H. (2017). Organizational culture and leadership (Fifth Edition). Hoboken: Wiley.
- Scott, W. R. (2014). *Institutions and organizations: Ideas, interests and identities* (Fourth edition). Thousand Oaks, California: Sage Publications Inc.
- Searle, G., & Filion, P. (2011). Planning context and urban intensification outcomes: Sydney versus Toronto. *Urban Studies*, 48(7), 1419-1438. 10.1177/0042098010375995.
- Segaert, A. A. (2008). *Urban/rural differences and the culture war in the United States and Canada*. (PhD thesis). McMaster University, Hamilton.
- Seiling, K. (2011). Smart Growth and the Region of Waterloo: Planning for Our Future: Report to Region of Waterloo Council. Kitchener, Ontario. Retrieved from https://www.regionofwaterloo.ca
- Senior, M. L., Webster, C. J., & Blank, N. E. (2004). Residential preferences versus sustainable cities: Quantitative and qualitative evidence from a survey of relocating owner-occupiers. *The Town Planning Review*, 75(3), 337-357.
- Servillo, L. A., & Van Den Broeck, P. (2012). The social construction of planning systems: A strategic-relational institutionalist approach. *Planning Practice and Research*, 27(1), 41-61. 10.1080/02697459.2012.661179.
- Sewell, J. (1994). Houses and homes: housing for Canadians. Toronto: James Lorimer & Co.

- Sewell, J. (2013, May 27). Golden Horseshoe growth plan under threat: Former Toronto mayor. *Toronto Star*. Retrieved from https://www.thestar.com/
- Shen, Q. (1996). Spatial impacts of locally enacted growth controls: The San Francisco Bay region in the 1980s. *Environment & Planning B: Planning & Design*, 23(1), 61-91.
- SHS Inc. (2007). The Simcoe County housing needs assessment and recommended policies and plans. Richmond Hill, Ontario.
- Skaburskis, A., & Tomalty, R. (2000). The effects of property taxes and development cost charges on urban development: perspectives of planners, developers and finance officers in Toronto and Ottawa. *Canadian Journal of Regional Science*, 23(2), 303-325.
- Skogstad, G. (2008). Policy networks and policy communities: Conceptualizing state-societal relationships in the policy process. In L. White, R. Simeon, R. Vipond & J. Wallner (Eds.), *The comparative turn in Canadian political science*. Vancouver: University of British Columbia Press.
- Slack, E. (2002). *Municipal Finance and the Pattern of Urban Growth*. (No. 160). Ottawa: Renouf Publishing Co.
- Song, Y., & Zenou, Y. (2006). Property tax and urban sprawl: Theory and implications for US cities. *Journal of Urban Economics*, 60(3), 519-534.
- Song, Y., & Zenou, Y. (2009). How do differences in property taxes within cities affect urban sprawl? Journal of Regional Science, 49(5), 801-831.
- Sorensen, A. (2010). Land, property rights, and planning in Japan: Institutional design and institutional change in land management. *Planning Perspectives*, 25(3), 279-302. 10.1080/02665433.2010.481178.
- Sorensen, A. (2011a). Uneven processes of institutional change: Path dependence, scale and the contested regulation of urban development in Japan. *International Journal of Urban and Regional Research*, 35(4), 712-734.
- Sorensen, A. (2011b). Evolving property rights in Japan: Patterns and logics of change. *Urban Studies*, 48(3), 471-491.

- Sorensen, A. (2016). Periurbanization as the institutionalization of place: The case of Japan. *Cities*, 10.1016/j.cities.2016.03.009
- Sorensen, A. (2018). Institutions and Urban Space: Land, Infrastructure, and Governance in the Production of Urban Property. *Planning Theory & Practice*, 19(1), 21-38. doi:10.1080/14649357.2017.1408136
- Sorensen, A., & Hess, P. (2015). Building suburbs, Toronto-style: Land development regimes, institutions, critical junctures and path dependence. *The Town Planning Review*, 86(4), 411-436.
- Sousa, S., & Pinho, P. (2015). Planning for shrinkage: Paradox or paradigm. *European Planning Studies*, 23(1), 12-32. 10.1080/09654313.2013.820082
- Spicer, Z. D. (2013). Regional organization and the dynamics of inter-municipal cooperation: Policy coordination between Ontario's separated cities and counties. (PhD Thesis). University of Western Ontario, London, Ontario.
- Sprawl hits above the belt. (2007, March 10). Toronto Star. Retrieved from https://www.thestar.com
- Stantec Consulting Ltd. (2011). Waterloo Core Area Infrastructure Assessment Volume 1 Final Report. (Project No. 1611 10917). Kitchener, Ontario.
- Statistics Canada. (2006). 2006 Census of Population. Ottawa.
- Statistics Canada. (2007). 2006 Community Profiles, 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa.
- Statistics Canada. (2009). Local government revenue and expenditures for fiscal year ending closest to December 31, annual (dollars). Table 385-0003 CANSIM database. Ottawa.
- Statistics Canada. (2011). *National Household Survey: Commuting Flow Census Subdivisions*. Statistics Canada Catalogue no. 99-012-X2011032. Ottawa
- Statistics Canada. (2012). 2011 Census of Population. Ottawa.
- Steelman, T. A., & Hess, G. R. (2009). Effective protection of open space: Does planning matter? Environmental Management, 44(1), 93-104. 10.1007/s00267-009-9272-1

- Stevens, M. (2010). Implementing Natural Hazard Mitigation Provisions: Exploring the Role That Individual Land Use Planners Can Play. *Journal of Planning Literature*, *24*(4), 362-371. 10.1177/0885412210375821
- Streeck, W., & Thelen, K. A. (2005). *Beyond continuity: Institutional change in advanced political economies*. New York: Oxford University Press.
- Suitner, J. (2014). Cultures of image construction approaching planning cultures as a factor in urban image production. *European Spatial Research and Policy*, 21(1), 39-51. 10.2478/esrp-2014-0004
- Sung, C. Y., Yi, Y., & Li, M. (2013). Impervious surface regulation and urban sprawl as its unintended consequence. *Land use Policy*, *32*, 317-323.
- Sutcliffe, J. B. (2011). Neoliberalism in a small Canadian City? Windsor city council and the reform of the detroit river border crossing. *American Review of Canadian Studies*, 41(3), 274-292.
- Sweet, M. (2011). Does traffic congestion slow the economy? *Journal of Planning Literature*, 26(4), 391-404.
- Talen, E. (2013). Zoning for and against sprawl: The case for form-based codes. *Journal of Urban Design*, 18(2), 175-200.
- Talen, E. (1996). Do plans get implemented? A review of evaluation in planning. *Journal of Planning Literature*, 10(3), 248-259.
- Taylor, L. (2011). No boundaries: exurbia and the study of contemporary urban dispersion. *GeoJournal*, 76(4), 323-339. 10.1007/s10708-009-9300-y
- Taylor, Z. (2013). Rethinking planning culture: A new institutionalist approach. *Town Planning Review*, 84(6), 683-702.
- Teitz, M. B. (2007). Planning and the new institutionalisms. In N. Verma (Ed.), Boston: Elsevier.
- Thompson, D. (2013). Suburban sprawl: Exposing hidden costs, identifying innovations. Ottawa: Sustainable Prosperity.

- Throop, B. (2010). Planning for great streets: A report on how the City of Peterborough can transform its street network into cherished public space. Peterborough, Ontario.
- Tomalty, R. (2014, April). Review of implementing the Growth Plan for the Greater Golden Horseshoe. *Alternatives Journal*.
- Tomalty, R., & Skaburskis, A. (2003). Development charges and city planning objectives: The Ontario disconnect. *Canadian Journal of Urban Research*, 12(1 SUPPLEMENT), 142-161.
- Tomalty, R., & Skaburskis, A. (1997). Negotiating development charges in Ontario: average cost versus marginal cost pricing of services. *Urban Studies*, *34*(12), 1987-2022.
- Town of Collingwood. (2012). Official Plan, Office Consolidation December 2012. Collingwood, Ontario.
- Town of Wasaga Beach. (2013). Long-term Residential Use of Tourism Accommodation Establishments, Discussion Paper. Wasaga Beach, Ontario
- Township of Cavan Monoghan. (2015). Official Plan. Millbrook, Ontario.
- Township of Galway-Cavendish and Harvey. (2011). Official Plan of the Township of Galway-Cavendish and Harvey. Trent Lakes, Ontario.
- Township of Havelock-Belmont-Methuen. (2004). Official Plan of the Havelock-Belmont-Methuen, Office Consolidation. Havelock, Ontario
- Township of Springwater. (2008). Midhurst Secondary Plan. Midhurst, Ontario.
- Township of Woolwich. (1993). Growth Strategy and Master Servicing Study. Woolwich, Ontario
- Turgeon, M., & Vaillancourt, F. (2002). The provision of highways in Canada and the Federal Government. *Publius*, *32*(1, Federalism and Surface Transportation), pp. 161-180.
- urbanMetrics. (2008). City of Peterborough downtown economic analysis. Peterborough, Ontario.
- Urry, J. (2004). The 'system' of automobility. *Theory, Culture and Society, 21*(4-5), 25-39.

- Van Der Heijden, J. (2010). A short history of studying incremental institutional change: Does explaining institutional change provide any new explanations? *Regulation and Governance*, 4(2), 230-243.
- Vanderlinde, R. (2012, Jun 21, 2012). Big Bay Point's Friday Harbour opens 2014. Innisfil Journal
- Velvin, J., Kvikstad, T., Drag, E., & Krogh, E. V., J. (2013). The impact of second home tourism on local economic development in rural areas in Norway. *Tourism Economics*, 19(3), 689-705.
- Verma, N. (Ed.). (2007). Institutions and planning. Boston: Elsevier.
- Waldner, L. S. (2009). Into the black hole: Do local governments implement their spatial policies? *Land use Policy*, 26(3), 818-827. 10.1016/j.landusepol.2008.10.011
- Walks, A. (2014). Stopping the 'war on the car': Neoliberalism, Fordism, and the politics of automobility in Toronto. *Mobilities*, , 1-21. 10.1080/17450101.2014.880563
- Wassmer, R. W. (2002). Fiscalisation of land use, urban growth boundaries and non-central retail sprawl in the western United States. *Urban Studies*, *39*(8), 1307-1327.
- Wassmer, R. W. (2008). Causes of urban sprawl in the United States: Auto reliance as compared to natural evolution, flight from blight, and local revenue reliance. *Journal of Policy Analysis and Management*, 27(3), 536-555. 10.1002/pam.20355
- Watt, L. (2009, Dec 08). County to Barrie: Let's start fresh. *Barrie Advance*. Retrieved from https://www.simcoe.com
- Watt, L. (2012, Jan 23). Developers like Simcoe growth plan. *Midland Mirror*. Retrieved from https://www.simcoe.com
- Wedley, B. (2009, May 27). Near-empty house at growth meeting. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Wedley, B. (2010, December 10). North-end residents annexed by Peterborough two years ago seeking city water, sewer servicing. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com

- Wedley, B. (2013a, April 9). City to review sidewalks policy. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Wedley, B. (2013b, September 12). Earning less, paying more for rent in Peterborough. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Wedley, B. (2013c, September 4). Sidewalks on both sides of short street rejected by council. *Peterborough Examiner*. Retrieved from https://www.thepeterboroughexaminer.com
- Weiss, M. A. (1987). The rise of the community builders: The American real estate industry and urban land planning. New York: Columbia University Press.
- Wekerle, G. R., Sandberg, L. A., Gilbert, L., & Binstock, M. (2007). Nature as a cornerstone of growth: Regional and ecosystems planning in the Greater Golden Horseshoe. *Canadian Journal of Urban Research*, 16(1 SUPPL.), 20-38.
- White, R. (2007). *The Growth Plan for the Greater Golden Horseshoe in historical perspective*. Toronto, Ontario: The Neptis Foundation.
- Wilson, G. A. (2014). Community resilience: Path dependency, lock-in effects and transitional ruptures. *Journal of Environmental Planning and Management*, 57(1), 1-26. 10.1080/09640568.2012.741519
- Windsheimer, D. (2007). New regionalism and metropolitan governance in practice: a major smart growth construction project in the Waterloo Region the light rapid transit Project (Masters Thesis). University of Waterloo, Waterloo, Ontario.
- Winter, S. C. (2012). Implementation perspectives: Status and reconsideration. In B. G. Peters, & J. Pierre (Eds.), *The SAGE handbook of public administration* (2nd ed., pp. 265-278). London: Sage Publications Inc.
- Wolfe, J. M. (2002). Reinventing planning: Canada. *Progress in Planning*, 57(3-4), 207-235. 10.1016/S0305-9006(02)00010-7
- Woo, M., & Guldmann, J.-M. (2011). Impacts of urban containment policies on the spatial structure of US metropolitan areas. *Urban Studies*, 48(16), 3511-3536.
- Woodlief, A. (1997). The path-dependent city. Urban Affairs Review, 33(3), 405-437.

- Woods, M. (2011). The local politics of the global countryside: Boosterism, aspirational ruralism and the contested reconstitution of Queenstown, New Zealand. *GeoJournal*, 76(4), 365-381. 10.1007/s10708-009-9268-7
- Wunderlich, G. (2000). Hues of American agrarianism. Agriculture and Human Values, 17(2), 191-197.
- Ye, L., Mandpe, S., & Meyer, P. B. (2005). What is "smarth growth" really? *Journal of Planning Literature*, 19(3), 301-315. 10.1177/0885412204271668
- Yin, M., & Sun, J. (2007). The impacts of state growth management programs on urban sprawl in the 1990s. *Journal of Urban Affairs*, 29(2), 149-179. 10.1111/j.1467-9906.2007.00332.x

Appendix A. Standardized Interview Questions

Interview Questions

Smart Growth and the Growth Plan for the Greater Golden Horseshoe

These interview questions are about the challenges and opportunities in implementing Smart Growth strategies in Ontario, with specific attention to the Growth Plan for the Greater Golden Horseshoe (the Growth Plan). We define Smart Growth as the policies and practices that promote compact forms of development which reduce automobile dependence through higher density, mixing of land uses and greater public and active modes of transportation than present development. Interviewees will be involved in different aspects of urban development and design and growth management. Therefore some questions may be relevant to some individuals but not to others. You may choose not to answer a question if it does not correspond to your involvement and experience. Please remember that your answers will be kept confidential.

The interview is organized into two sections. The first deals with Smart Growth in general, and more specifically with the conditions that are favourable to its implementation and the obstacles that confront Smart Growth policies. The second examines the approaches local and regional administrations will take relative to the policy directives present in the provincial Growth Plan.

Section 1: Smart Growth

- 1) What are in your opinion the most important ways of advancing Smart Growth strategies (for example, attempts to achieve life style changes, shifts in land use and transportation policies, different planning and development processes)?
- 2) Can you identify a successful Smart Growth initiative promoted by your organization, or which took place within your locality or region? If so, can you describe it and focus on the conditions that led to its success?
- 3) What are in your opinion the most important obstacles confronting Smart Growth strategies (for example, prevailing life styles, consumer preferences, insufficient public sector funding)?
- 4) Can you identify a Smart Growth initiative contemplated or taken by your organization, or within your locality or region, which failed to be implemented or to achieve desired outcomes due to obstacles such as those mentioned in your previous answer?

- 5) Do you feel that Smart Growth strategies could eventually profoundly alter urban development?
 - a. If the answer is yes: What circumstances would be needed for this to happen?
 - b. If the answer is no: Why is Smart Growth likely to be ineffective in this regard? What else could be done to alter urban development?

Section 2: Growth Plan

- 1) In your opinion are the elements that are necessary for successful Smart Growth strategies present in the Growth Plan? Which are present and which are not?
- 2) Do you feel that the Growth Plan prescribed under the Places to Grow Act is an effective policy instrument to achieve Smart Growth?
 - a. Is the Growth Plan an effective tool to plan for active transportation, complete communities and reducing automobile dependency?
 - b. Which aspects of Smart Growth does it most promote, and to which aspects does it pay less attention?
- 3) Do you feel that the Growth Plan is an effective tool for preventing urban encroachment into green spaces and agricultural areas? Why or why not?
- 4) Can you mention examples of Smart Growth interventions within your locality or region, which were implemented as a result of provincial policy requirements through the Growth Plan?
- 5) What opportunities and challenges have you faced, or are you anticipating facing, when implementing the following four requirements of the Growth Plan?
 - a. achieving intensification and density targets for your municipality's or region's built up area and within intensification areas, that is, corridors and urban growth centre(s)
 - b. planning for compact, transit-friendly, complete communities in designated greenfield areas
 - c. planning for mixed uses (residential, commercial, office, institutional and employment), and establishing/maintaining employment areas

- d. reducing automobile dependency, creating walkable and cyclable communities and increasing the proportion of people using alternative modes of transportation to get around (transit, walking and cycling).
- 6) Are there instances where you were unable to implement Smart Growth interventions called for by the Growth Plan? If so what was the nature of the obstacles?
- 7) Do you feel that your region's implementation of Growth Plan policies will profoundly alter urban development?

Appendix B. Planning Documents, Media Accounts and Academic Literature Reporting Barriers to Growth Plan Implementation

Waterloo

- 1. Bunting, T., & Filion, P. (1999). Dispersed city form in Canada: A Kitchener CMA case example. *Canadian Geographer*, 43(3), 268-287.
- 2. Canadian Broadcasting Corporation. (Apr 15, 2013). Province to join region in attempt to save development plan. *CBC News*.
- 3. Casello, J. M., Law, J., Drescher, M., Lewis, G., Feick, R., Moos, M., et al. (2013). *Open letter regarding ruling of the Ontario Municipal Board (OMB) on the Region of Waterloo's Official Plan (ROP)*. Unpublished manuscript.
- 4. City of Cambridge. (2009). Official Plan Review Settlement Pattern / Growth Management Policies Discussion Paper. Cambridge, Ontario.
- 5. City of Kitchener. (2009). KGMS Implementation Program Phase I Draft 2009-2010 and Post 2010 Growth Management Plan, May 24, 2009. Kitchener, Ontario.
- 6. Defields, E. (2013). Property size preferences and the value of private and public outdoor spaces amid a shift to high-density residential development: A case study of Kitchener-Waterloo, Ontario. MES thesis, University of Waterloo.
- 7. Desmond, P. (Oct 14, 2014). 2014 election: Wealthy Waterloo not without its challenges. *The Record*.
- 8. Desmond, P. (Jul 16, 2012). Region scores high marks for re-using land. *The Record*.
- 9. Desmond, P. (Oct 13, 2014). Region of Waterloo seeks judicial review on OMB decision. *The Record*.
- 10. Hare, M. (2001). Exploring Growth Management Roles in Ontario: Learning from "Who Does What" Elsewhere. Prepared for The Ontario Professional Planners Institute (OPPI) by Urban Strategies Inc.
- 11. Haworth, R. (2011). Concerns about the LRT proposal. Presentation to Region of Waterloo Council.
- 12. Hemson Consulting Ltd. (2009). *Growth management strategy land inventory and capacity analysis, Cambridge.* Cambridge, Ontario.
- 13. Jackson, J. (Oct 29, 2014). Region making growth suggestions for province's Places to Grow Plan. *Cambridge Times*.
- 14. City of Kitchener. (2009). Kitchener Growth Management Strategy: Planning for a Healthy Kitchener. Kitchener, Ontario.
- 15. Light rail transit dominates regional debate. (Oct 21, 2010). Cambridge Times.
- 16. Leibovitz, J. (2003). Institutional barriers to associative city-region governance: The politics of institution-building and economic governance in 'Canada's Technology Triangle'. *Urban Studies*, 40(13), 2613-2642.
- 17. Martin, R. (Oct 26, 2007). Residents seek deal to lessen project's impact: City talks with developer continue. *Cambridge Times*
- 18. Pembina Institute. (2007). *Ontario Community Sustainability Report* 2007. Appendix 2. Review of the Region of Waterloo Plans and Actions against Smart Growth Assessment Criteria. URL: https://www.pembina.org/reports/Waterloo Appendx+Summary.pdf.
- 19. Pender, T. (Aug 18, 2011). Neighbours nervous about higher-density townhouse project. *The Record*.
- 20. Pender, T. (Dec 01, 2010). Waterloo Region on the front line in province's battle against urban sprawl. *The Record*
- 21. Pender, T. (Jan 23, 2013). Provincial tribunal sets back Region's efforts to curb urban sprawl. *The Record*.
- 22. Pender, T. (Aug 10, 2013). City urged to be open about intensification efforts. *The Record*.
- 23. Pender, T. (Aug 15, 2013). OMB decision undermines Region's authority, prof says. *The Record*.

- Pender, T. (Feb 09, 2012). Opposition expected as Kitchener's urban landscape intensifies, mayor says. The Record.
- 25. Anon. (Apr 12, 2013). Ontario will apply to side with region in court case over urban sprawl. *The Record*.
- 26. Pigg, S. (Mar 20, 2015). Waterloo housing: the dream ... and the surprising reality. *Toronto Star*.
- 27. Anon. (Jan 29, 2013). Region appeals OMB decision. The Record.
- 28. Anon. (Jun 07, 2012). Region to face developers over land use plan. *The Record*.
- 29. Ontario Municipal Board. (Jan 21, 2013). New Region of Waterloo Official Plan: Case No. PL110080.
- 30. Scian, K. (Apr 1, 2015). Time to change the rules of the OMB game. Waterloo Chronicle.
- 31. Social Planning Council of Cambridge and North Dumfries (2006). *Growth Management Concerns in our Community*. Cambridge, Ontario.

Simcoe

- 1. Anon. (Aug 25, 2009). Growth communities hope to work together. Alliston Herald.
- 2. Ali, A. K. (2008). Greenbelts to contain urban growth in Ontario, Canada: Promises and prospects. *Planning Practice and Research*, 23(4), 533.
- 3. Anon. (Oct 18, 2010). 'Simcoe County is relatively weak,' 'change is needed' study. New Tecumseth Free Press.
- 4. Anon. (Nov 06, 2007). Barrie and its neighbours at odds over future growth. *Barrie Advance*.
- 5. Bell, R. (Jan 9, 2012). MPPs left in the dark over 'new vision' for County. Barrie Examiner.
- 6. Berkeley Consulting Group Ltd. (2010). Simcoe governance review final report.
- 7. Birnbaum, L., Nicolet, L., & Taylor, Z. (2004). Simcoe County: The new growth frontier. Toronto: Neptis Foundation.
- 8. Caldwell Consulting. (2006). *Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Existing capacities assessment, rural development potential report.*
- 9. Campaign Lake Simcoe. (2010). Continuing to promote sprawl in Simcoe County: Campaign Lake Simcoe's response to the proposed Simcoe amendment to the Growth Plan.
- 10. Chiarelli, B. (Jul 9, 2012). Letter from Minister of Infrastructure and Minister of Transportation, Bob Chiarelli to County of Simcoe Warden, Cal Patterson.
- 11. City of Barrie. (Apr 28, 2009). Barrie's vision supports sustainable growth [Press Release].
- 12. City of Barrie. (2009). Simcoe Area: A Strategic Vision for Growth. Staff Report CIA001-09.
- 13. City of Barrie (2009) Submission to the Standing Committee on Justice Policy respecting Bill 196 Barrie-Innisfil Boundary Adjustment Act 2009.
- 14. Clearview Township. (2009). Letter to Simcoe County re: Area wide Growth Plan. Unpublished manuscript.
- 15. Clearview Township. (2009). Directions for growth: A Growth Plan for Clearview, 2009-2031.
- 16. County of Simcoe. (1998). Official Plan of the County of Simcoe, consolidated 2008. Midhurst, Ontario.
- 17. County of Simcoe. (2005). Memo from Simcoe planning department to Corporate Services Committee, June 15, 2005, item number: CS 05-186. Midhurst, Ontario.
- 18. County of Simcoe. (2005). Big bay point Ontario Municipal Board hearing position. Memo from Simcoe planning department to Corporate Services Committee, August 10, 2005 item number: CS 05-204. Midhurst, Ontario.
- 19. County of Simcoe. (2008, modified 2013). Official Plan of the County of Simcoe. Midhurst, Ontario.
- 20. County of Simcoe. (2011). *Proposed Growth Plan Amendment No. 1 for the Simcoe Sub-Area*. Report from Simcoe Planning Department to Corporate Services Committee, January 12, 2011. Midhurst, Ontario.

- 21. County of Simcoe. (2013). *Midhurst secondary plan update, January 9, 2013*. Report to Corporate Services Committee, County of Simcoe No. CS 13-007. Midhurst, Ontario.
- 22. County of Simcoe Governance Committee. (2012). *Governance structure, September 13, 2012*. Report No. GOV 12-003. Midhurst, Ontario.
- 23. Dillon Consulting Limited. (2006). Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Growth potentials assessment report.
- 24. Doyle, V. (2009). Letter to Ontario Growth Secretariat, Ministry of Energy and Infrastructure.
- 25. Environmental Defence. (2010). *Money and politics in Simcoe County shining a light on municipal election financing*. Toronto, Ontario.
- 26. Gee, M. (April 19, 2013). The 'new urbanism' a tough sell in Barrie. The Globe and Mail.
- 27. Glynn, D. (February 2, 2011). County can't get any respect from province. Midland Free Press.
- 28. Gombu, P. (Dec 12, 2009). Planner slams Simcoe sprawl; key Ontario official warns his counterparts development along 400 could spiral out of control. *Toronto Star*.
- 29. Gombu, P. (Jun 8, 2009). Province pushes secret deal for Simcoe. *Toronto Star*, pp. GT.1.
- 30. Gombu, P. (Mar 14, 2009). Vaughan firm threatens to move 2,500 jobs; company says it's moving to Manitoba if it can't 'leapfrog' protected greenbelt to build new plant. *Toronto Star*, pp. GT.1.
- 31. Guergis, T. (2009). Letter to Tiny Township regarding Simcoe area wide growth plan and County Council resolution, April 28, 2009.
- 32. Hain, B. (May 28, 2009). Innisfil takes protest to Queen's Park. Barrie Advance.
- 33. Harries, K. (2010). 'Moose under table' impedes change at county, June 25 2010. URL: http://aware-Simcoe.ca/2010/06/governance-5/.
- 34. Hemson Consulting Ltd. (2006). *Growth Management Strategy: Provincial Policies Subcommittee, Discussion Paper for Initial Subcommittee meeting.* Toronto, Ontario
- 35. Hemson Consulting Ltd. (2008). *Simcoe Area Growth Plan*. Toronto, Ontario. URL: http://www.Simcoe.ca/Planning/Documents/Simcoe%20Area%20Growth%20Plan%20May%202008.pdf
- 36. Lake Simcoe Region Conservation Authority. (2003). *Lake Simcoe Environmental Management Strategy (LSEMS): State of the Lake Simcoe Watershed*. Newmarket, Ontario.
- 37. Lapointe Consulting Inc. (2006). Intergovernmental Action Plan for Simcoe, Barrie & Orillia: Existing capacities assessment, demographic, housing and employment trends in Barrie, Orillia and Simcoe County. Toronto, Ontario.
- 38. Malcolmson, C., & Donnelly, D. (January 31, 2012). Ontario's Growth Plan Amendment for Simcoe County? #Fail. *Huffington Post*.
- 39. Meridian Planning Consultants Inc. and the Centre for Spatial Economics. (2008). *Town of New Tecumseh Growth Management Strategy*. Barrie, Ontario.
- 40. Anon. (Dec 14, 2007). OMB rules in favour of big bay point resort. Barrie Advance.
- 41. Ontario Ministry of Energy and Infrastructure (MEI). (2009). *Simcoe area: A strategic vision for growth.* Toronto, Ontario.
- 42. Government of Ontario. (2010). *Lake Simcoe Phosphorus Reduction Strategy*. Toronto, Ontario: Queen's Printer for Ontario.
- 43. Ontario Ministry of Infrastructure (MI). (2012). Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, 2006: Simcoe sub-area amendment. Toronto, Ontario: Queen's Printer for Ontario.
- 44. Ontario Ministry of Municipal Affairs and Housing (MMAH). (2005). Letter from MMAH to County of Simcoe re: Proposed County OPA for Big Bay Point resort community, May 24, 2005.
- 45. Ontario Ministry of Municipal Affairs and Housing (MMAH). (2009). Letter to Warden Tony Geurgis re: Barrie-Innisfil Boundary Adjustment Act, 2009.

- 46. Ontario Ministry of Municipal Affairs and Housing (MMAH). (2011). Letter re: Appeal to the Ontario Municipal Board County of Simcoe approval of official plan amendment no. 38 for the township of SprIngwater, October 28, 2011.
- 47. Ontario Ministry of Municipal Affairs and Housing (MMAH). (2012). Letter to OMB re: Appeal to the Ontario Municipal Board Township of Springwater Official Plan Amendment no. 38, OMB no.: PL111181, Nov 28, 2012.
- 48. Ontario Ministry of Municipal Affairs and Housing (MMAH). (March 10, 2005). *Province helps Simcoe County plan for the future*. Toronto, Ontario: Queen's Printer for Ontario.
- 49. Ontario Municipal Board. (2009). *OMB hearing: Failure of Council of the County of Simcoe to announce a decision respecting proposed Official Plan Amendment no. 15, Aug. 07, 2009.* OMB No. PL071221.
- 50. Ontario Municipal Board. (2015). *OMB hearing: Failure to announce a decision respecting the Official Plan for the County of Simcoe*. OMB No. PL091167.
- 51. Patterson, C. (2011). Letter to Bob Chiarelli re: Proposed Growth Plan Amendment 1 to the Growth Plan for the Greater Golden Horseshoe, Jan 28, 2011.
- 52. Pearce, S. (Jun 21, 2012). More than 1,000 homes coming to Bond Head. *Bradford and West Gwillimbury Topic*.
- 53. Planning Department, County of Simcoe. (2011). *Transit initiatives status (update). Report to Corporate Services Committee*. OMB No. CS 11-160.
- 54. Regional Municipality of York. (2008). Staff comments on Simcoe County's draft Official Plan. Report no. 11 of the Planning and Economic Development Committee for Regional Council.
- 55. Rosen, G., & Brewer, K. (2013). *Barrie at a crossroad: Dilemma of a mid-size city*. Planning in Theory and Practice, Trends in the Canadian Suburbs, Working Paper. Dalhousie University. Halifax, Nova Scotia.
- 56. Ontario Municipal Board. (2007). *OMB hearing: Big Bay Point development proposal appeal and decision Dec. 14, 2007.* OMB No. PL050290.
- 57. SHS Inc. (2007). *The Simcoe County housing needs assessment and recommended policies and plans*. Prepared For the Corporation of the County of Simcoe. Richmond Hill, Ontario.
- 58. Anon. (July 13, 2009). Simcoe County officials blew it. *Innisfil Examiner*.
- 59. Stein, D. L. (Dec 23 2009). Provincial planners propose a dubious future for Simcoe. *Toronto Star*.
- 60. Town of Wasaga Beach. (2013). Long-term residential use of tourism accommodation establishments, discussion paper. Wasaga Beach, Ontario.
- 61. Township of Springwater. (2013). Midhurst 20/20: Overview of the Midhurst Secondary Plan.
- 62. Anon. (Feb 05, 2009). Warden blasts MPP over border dispute: Carroll rewarding "unco-operative" Barrie. *Barrie Advance*.
- 63. Anon. (Nov 08, 2007). Warden doesn't get it. Why won't Barrie join County's growth planning?: Guergis. *Barrie Advance*.
- 64. Watson and Associates Economists Ltd. (2010). City of Barrie Growth Management Strategy population, housing and employment forecast 2006-2031. Phase 1. Mississauga, Ontario.
- 65. Watt, L. (Dec 08, 2009). County to Barrie: Let's start fresh. Barrie Advance.
- 66. Watt, L. (Jan 23, 2012). Developers like Simcoe growth plan. Midland Mirror.
- 67. Watt, L. (Jan 23, 2012). Ontario gives Simcoe a plan. *Midland Mirror*.

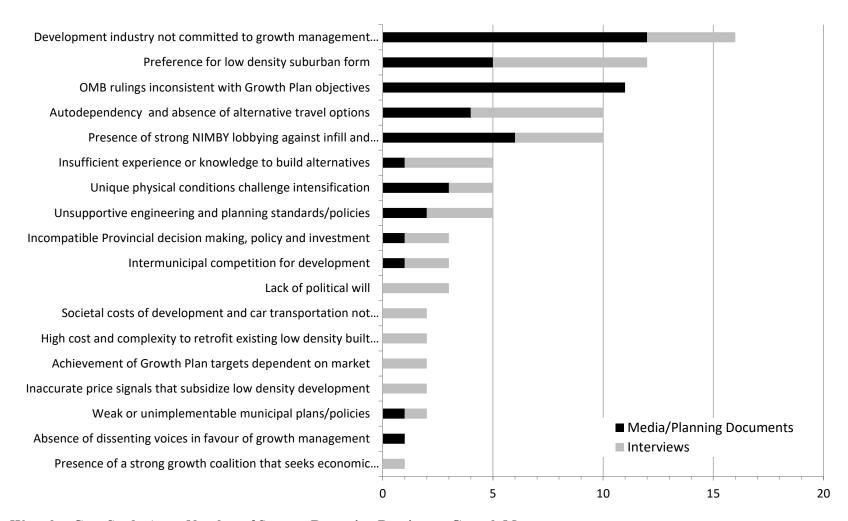
Peterborough

- 1. Bocking, S. (2005). Protecting the rain barrel: Discourses and the roles of science in a suburban
- 2 environmental controversy. Environmental Politics, 14(5), 611-628.
- 2. City of Peterborough Planning Division. (2009). *Central area masterplan final report*. Peterborough, Ontario.

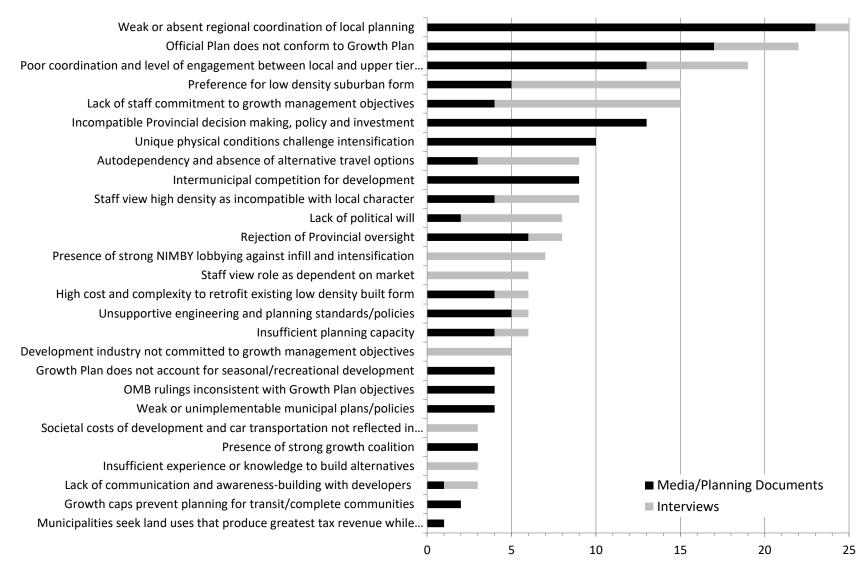
- 3. City of Peterborough Planning Division. (2009). *Planning Peterborough to 2031: How the Growth Plan for the Greater Golden Horseshoe will affect the City of Peterborough*. Peterborough, Ontario.
- 4. City of Peterborough Planning Division. (2011). *City of Peterborough residential monitoring report*. Peterborough, Ontario.
- 5. County of Peterborough. (2013). *Official plan*. Peterborough, Ontario. Retrieved 11/04, 2013, from http://county.Peterborough.on.ca/official-plan
- 6. Eagle, G. (June 7, 2010). Cavan Monaghan's draft Official Plan would scale back residential development in Fraserville. *Peterborough Examiner*.
- 7. Environmental Commissioner of Ontario. (2014). The rocky rollout of the Growth Plan for the Greater Golden Horseshoe. *Managing new challenges, ECO annual report, 2013-14* (pp. 147-154). Toronto, Ontario: Environmental Commissioner of Ontario.
- 8. Garfinkel, J. and J. Kohler. (Feb 4, 2010). Millbrook water fight runs deeper. Peterborough Examiner.
- 9. Gordon, K. (Sep 6, 2012). Peterborough County Councillors want to explore a County public transit system. *Peterborough Examiner*.
- 10. Gordon, K. (Jun 5, 2013). County staying out of plans for new transit system. Peterborough Examiner.
- 11. Hunt, Malcolm (Director of Planning and Development Services). (2009). Report to City of Peterborough planning committee re: Growth Plan for the Greater Golden Horseshoe No. Report PLPD09-018. Peterborough, Ontario.
- 12. Isaacson, F. (Jan 22, 2009). County Council blasts Growth Plan. Peterborough Examiner.
- 13. Isaacson, F. (May 4, 2011). Cavan Monaghan scraps Fraserville development plan. Peterborough Examiner.
- 14. Kovach, J. (Apr 15, 2014). Council backs Lily Lake Secondary Plan, with Coun. Keith Riel the lone opponent, after lengthy meeting. *Peterborough Examiner*.
- 15. Neeley, J. (Nov 20, 2008). County forecasts 75,000 residents by 2036. Peterborough Examiner.
- 16. Peterborough Social Planning Council. (2008). Peterborough profile 2008. Peterborough, Ontario
- 17. Statistics Canada. (2007). *Peterborough, Ontario (Code3515014) (table). 2006 community profiles. 2006 census.* No. Statistics Canada Catalogue no. 92-591-XWE). Ottawa.
- 18. urbanMetrics. (2008). City of Peterborough downtown economic analysis. Peterborough, Ontario.
- 19. Wedley, B. (April 18, 2009). City council to consider Growth Plan. *Peterborough Examiner*.
- 20. Wedley, B. (May 27, 2009). Near-empty house at growth meeting. Peterborough Examiner.
- 21. Wedley, B. (Apr 22, 2009). Builder sees growth challenge. Peterborough Examiner.
- 22. Wedley, B. (Apr 22, 2009) Growth restrictions not good for county, reeves tell council. *Peterborough Examiner*.
- 23. Wedley, B. (Aug 10, 2012). Brookfield Homes accuses Peterborough city, county of holding up 550-home subdivision. *Peterborough Examiner*.
- 24. Wedley, B. (April 9, 2013). City to review sidewalks policy. *Peterborough Examiner*.
- 25. Wedley, B. (Sep 12, 2013). Earning less, paying more for rent in Peterborough. Peterborough Examiner.
- 26. Wedley, B. (Feb 9, 2012). Projected 1% population growth per year instead wound up being a decline for Peterborough County, census finds. *Peterborough Examiner*.
- 27. Wedley, B. (Dec 11, 2012). Lily Lake area development plan opponents fear urban sprawl. *Peterborough Examiner*.
- 28. Wedley, B. (Sep 4, 2013). Sidewalks on both sides of short street rejected by council. *Peterborough Examiner*.
- 29. Pentikainen, P., & Brunger, A. G. (2010). Ontario lottery gaming (OLG) corporation gaming revenues and municipally-inspired urban development in a traditionally rural Ontario township: The case of Cavan Monaghan. In K. B. Beesley (Ed.), *The rural-urban fringe in Canada: Conflict and controversy* (pp. 251-268). Brandon: Rural Development Institute.

30.	Greater Peterborough Area Economic Development Corporation. (2012). Appendix $E-Current$ Conditions Report. Peterborough, Ontario.	Sustainable Peterborough,

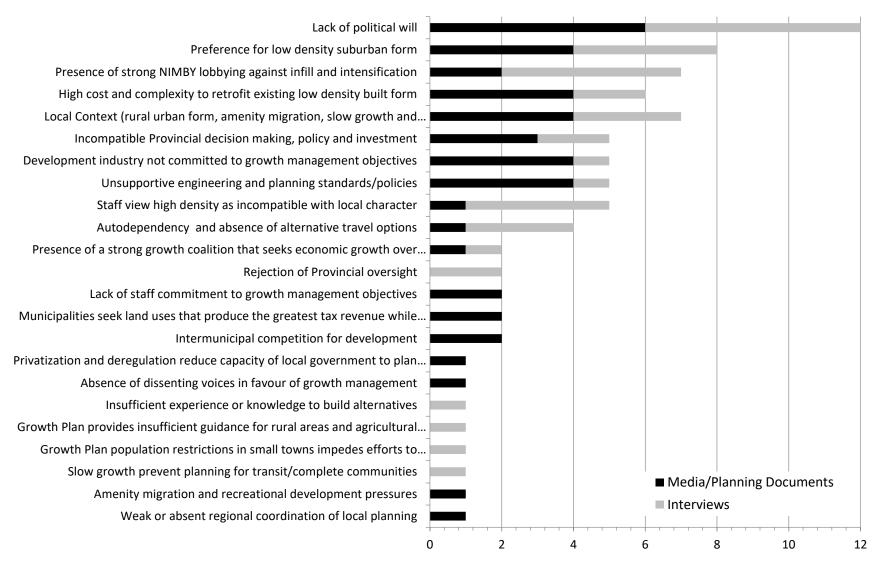
Appendix C. Reporting Frequency



Waterloo Case Study Area: Number of Sources Reporting Barriers to Growth Management.



Simcoe Case Study Area: Number of Sources Reporting Barriers to Growth Management.



Peterborough Case Study Area: Number of Sources Reporting Barriers to Growth Management.