

Can Limited Development be Counted?

**A Review of Consent Policy Approaches in Eastern Ontario
to Regulate Limited Residential Development in Rural Designations**

A Major Research Paper

Presented to the

Faculty of Graduate Studies

of the University of Guelph

by

Melissa Banford

In partial fulfillment for the degree of Master of Planning (MPLAN)

Fall, 2014

Abstract

Rural Ontario is challenged with pressures for residential development which can have negative social, cultural and financial impacts on rural communities. The creation of new residential lots, primarily occurring through the consent (severance) process, has resulted in scattered development and land fragmentation. Provincial and municipal policies to limit rural residential development have been implemented to control excessive development and sprawl.

This study examines the consent policies of twenty (20) municipalities in the region of Eastern Ontario to identify current policy trends for limiting development in rural designations as well as any existing unique policy approaches. The research findings demonstrate a regional reliance on traditional categories of consent policies. Innovative policies are also being implemented in the region however this is only currently occurring within a small number of municipalities. These policy trends and examples of alternative development approaches may be of interest to municipal planners and policymakers in their future policy considerations for limited rural residential development.

Acknowledgements

With gratitude, I wish to acknowledge my advisor Dr. Wayne Caldwell and committee member Dr. Harry Cummings, who provided guidance and helpful comment during the completion of this paper.

I would also like to acknowledge the assistance of my parents Deborah and John and Norma who generously gave their time to care for my son Liam.

Finally, I would like to thank my friend and colleague Barbara Kalivas. It was a result of her belief in my ability, and her example of what a good planner is, which inspired me to become a planner in the first place.

TABLE OF CONTENTS

1. Introduction.....	6
1.1 Goal.....	7
1.2 Objectives.....	7
1.3 Scope of Research.....	8
2. Literature Review.....	9
2.1 Defining Rural and Changes to the Rural Areas.....	9
2.2 Motivations for Rural Residential Living.....	11
2.3 Impacts of Rural Development.....	13
2.3.1 Agricultural, Public Health and Environmental Social Implications.....	14
2.3.2 Municipal Financial Impacts.....	17
2.3.3 Rural Aesthetics and Culture.....	21
3. New Lot Creation in Rural Ontario.....	23
3.1 Planning Act.....	24
3.2 Provincial Policy Statement (PPS).....	25
3.3 Official Plans.....	28
3.4 Summary.....	29
4. Case Study Methodology.....	31
4.1 Study Area: Eastern Ontario Region.....	31
4.2 Official Plan Policy Reviews.....	35
4.3 Interviews.....	36
5. Case Study Results.....	38
5.1 Rural Designation Policies.....	38
5.1.1 Rural Character Policies.....	38
5.1.2 Scattered Development Policies.....	39
5.1.3 Limited Rural Residential Development Policies.....	39

5.2	Consent Policies.....	40
5.2.1	Eligibility Date and Number of New lots Permitted.....	41
5.2.2	Lot Size.....	42
5.2.3	Strip/Ribbon Development Policies.....	44
5.2.4	Infilling Policies.....	45
5.3	Other Alternative or Unique Land Pattern Policies.....	47
5.3.1	Policy Caps on Rural Development.....	49
5.3.2	Definitions and Policies Regulating Density Patterns.....	50
5.3.3	Cluster Development Policies.....	52
5.4	Summary of Findings.....	55
6.	Discussion.....	57
7.	Conclusion.....	60
8.	References.....	63
9.	Appendix	
9.1	Policy Review Matrix.....	69

List of Tables:

Table 1:	Municipalities within the Eastern Ontario Region Sample Study Area.....	34
Table 2:	Study Area: Rural Policy and Consent Policy Summary.....	47

List of Figures:

Figure 1:	Percentage of Population Distribution Rural and Urban 1941 to 2011 (Canada).....	10
Figure 2:	Eastern Ontario Region Location Map.....	31

1. Introduction

Residential development in the countryside has, within Ontario, been the focus of study for nearly 50 years. From a land use planning perspective, residential development (historically referred to as Urban Development in Rural Areas (UDIRA), Joseph & Smit, 1985), has been of concern due to its relationship to agriculture, community services and the basic fabric and aesthetics of the rural community. These concerns have led to the development of policy at both a provincial and municipal level. While planning has attempted to regulate rural residential development there has been diverse community perspectives on what is considered to be an appropriate scale and pattern for development.

A significant body of research exists relating to the preservation of agricultural lands specifically and existing policy at the provincial level has implemented restrictions on consents to guard against new residential lot development within such prime-agricultural areas. The regulation of residential new lot creation in rurally designated areas, outside of prime-agricultural areas, are not as well defined. Rural residential lots are considered in this research to be lots created primarily for residential use and are generally not sufficiently sized to permit small scale agricultural or hobby farm uses. Such rural residential lots require a minimum lot area to accommodate private sewage disposal systems and, at minimum, typically range from 0.2 ha (0.5 ac.) to 1 ha (2.5 ac.) as established by the applicable municipal Official Plan.

Incremental lot creation in rural areas, for residential use or other purposes, can result in negative impacts with potential consequences of creating or further contributing to rural sprawl. This research will examine the current provincial and municipal policy approaches specifically applicable to rural designations to explore how development is currently being regulated.

1.1 Goal

The basis of this research paper is to assist Ontario municipalities in their policy creation to regulate and limit residential development in their rural areas which is a provincial policy directive. The Provincial Policy Statement (PPS) 2014 permits only limited residential development of rural lands under Section 1.1.5.2(c). This was also the same directive of the 2005 PPS, under Section 1.1.4.1(a). The absence of definitions for “limited residential development” creates difficulty for managing rural development policy and can result in subjective municipal planning decisions.

It is the goal of this research to examine whether Official Plan consent (severance) policy tools are currently being implemented by municipalities within Eastern Ontario to limit rural residential development. This research will focus on rural designation policies within municipal Official Plans including general intent/objective policies and consent policies directly applicable to this designation. This research will also reflect on the effectiveness of these policies as a tool to define and preserve their rural areas.

1.2 Objectives

Three (3) main objectives of this research include:

- 1) A literature review of research on the social, cultural, environmental and economic costs of rural residential development and the legislative and policy approaches for regulating limited residential development;
- 2) An examination of whether the PPS policy directive is reflected in local Official Plan consent policies for limiting rural residential development; and
- 3) An examination of current trends or preferences included in rural consent policies and the identification of any unique or alternative policy approaches being utilized by municipalities.

1.3 Scope of Research

This research will examine how designated rural areas are being defined in general terms and some of the challenges these areas are currently facing with population and demographic changes. This paper will also review some of the motivating factors advanced by academics for rural migration and the potential impacts new and increased residential development pressures may have on rural areas.

As the primary tool for the creation of new residential lots within rural areas, consents (severances) can have long-lasting implications on the rural character and viability of rural communities. Official Plan consent policies for regulating limited residential development within rural designations will be reviewed to identify any trends in development criteria and policies that support the protection and enhancement of rural areas and their character. This research will specifically review existing Official Plan consent policies within the geographic region of Eastern Ontario to identify: whether there are policy trends; the potential existence of regional approaches and; whether there are any unique or alternative consent policies currently in existence to manage limited residential development. Twenty (20) municipal Official Plans have been reviewed within the Eastern Ontario region, along with key informant interviews of planning staff, in cases where unique policies were in existence or where policies were felt by the author to be stronger in language or approach for preserving rural character and limiting residential development.

In addition to the Official Plan policy review and interviews within the case study area, an interview with Ministry of Municipal Affairs and Housing (MMAH) staff was also conducted to identify other potential consent policies in the region that were outside of the twenty (20) municipalities highlighted in the case study. While the twenty (20) municipality study area

provides a significant representation of the Eastern Ontario region, it was felt by the author that MMAH may offer additional insight into any individual municipalities who may be opting to utilize unique policies that varied from what may be generally viewed standard or typical consent policy approaches.

2. Literature Review

This research includes a literature review briefly examining the population and demographic changes rural areas have been experiencing over the last century which has generally resulted in rural population decreases. Despite the overall trend towards urbanization, some rural areas are experiencing growth pressures (Alasia, 2010), as a rural residential lifestyle continues to be desirable for many people. Regardless of what development pressures a particular rural area may or may not be currently facing, the creation of new residential uses has significant impacts on the rural community and its governance. A review of the impacts of rural residential development raised by researchers will be discussed and include: public health and environmental social costs; consequences on municipal finances; and changes in rural aesthetics and character. Finally, given the potential negative impacts, the researcher will determine if limiting this type of development is being translated into local planning policy and the challenges of defining policy around the goal to limit residential development in rural communities.

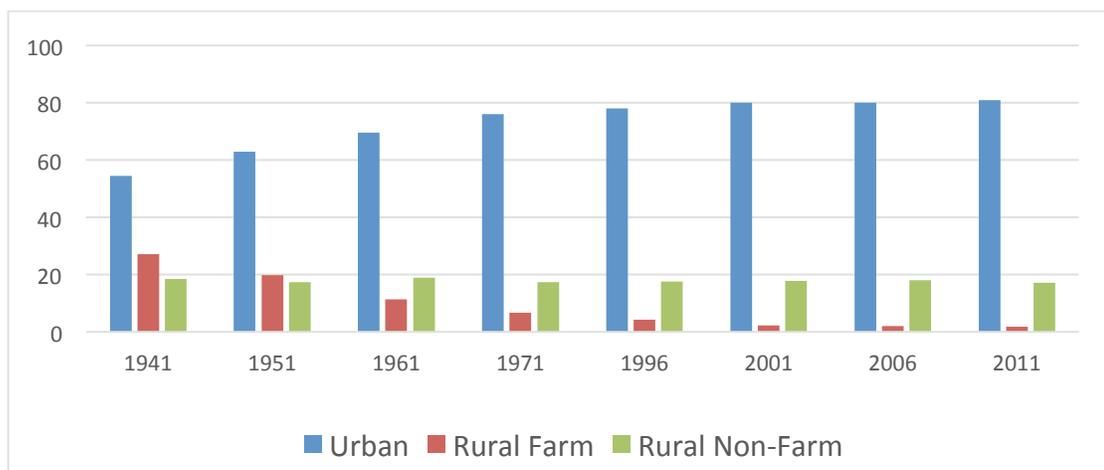
2.1 Defining Rural and Changes to the Rural Areas

Rural areas across Ontario are not homogenous in their composition or character. This results in defining what is a rural area or desirable rural characteristics across Ontario a difficult, if not an impossible, task. Distance and density are key factors that have been used in the

quantification of what constitutes rural areas (Prince Edward County, 2012). Statistics Canada uses density as a means to define rural areas which are deemed to be the areas which fall outside of their definition of an urban area. An urban area (now referred to as a population centre) is generally defined as an area containing a population over 1,000 with over 400 persons per square kilometer (Statistics Canada, 2011).

The population, livelihood and demographics of both Canada’s and Ontario’s rural areas have been subject to considerable change over the last number of decades. In the 1941 Census, Statistics Canada reported that 45.5% of the Canadian population resided within rural areas with the majority being farm residents at 59.4% of the total rural population (Basavarajappa and Ram, 1983). This is a significant departure from what was found in the 2011 Census where only 19% of the population resided within rural areas and 10.3% of the total rural population now being involved in farming (Statistics Canada, 2014). Figure 1 illustrates these changes which have resulted in an overall reduction of rural resident population to one which is now predominantly non-farm based.

Figure 1: Percentage of Population Distribution Rural and Urban 1941 to 2011 (Canada) *



* Figures from Basavarajappa and Ram, Statistics Canada , 1983; and 1996, 2001, 2006, 2011 Census of Canada, Statistics Canada

Some of the most significant factors outside of urban migration trends contributing to the rural population decline include the reduction in birth rates and the size of families and an aging population. Reduced birth rates and an aging population have been experienced by both urban and rural areas. The last century has seen a reduction in family size from an average of over 3 children per family at the beginning of the century being reduced to approximately 1.6 children in 2011 (Statistics Canada, 2013). The number of elderly residents has been steadily increasing in Canada with the number of people over 65 years increasing by 14.1% from 2006 to 2011 yet the number of people between 15 and 64 years only increased during this same time by 5.7% and children under 14 by 0.5% (Statistics Canada, 2014). This aging population trend is anticipated to further increase as the large generation of baby boomers, deemed to be persons born between 1946 and 1965, continue to reach the age of 65 (Statistics Canada, 2014).

Despite the reductions in overall family size and population aging, urban areas have generally increased in size, primarily as a result of immigration. Due to immigration of new residents being typically to urban areas, rural areas have not experienced similar levels of population injection (FCM, nd) coupled with a general trend of more rural residents seeking to move to urban areas. Changes in rural populations, whether they are increasing or decreasing, have implications on the health and viability of rural areas. Despite fluctuations in rural population trends, the pressures for creating new rural residential lots continue to be experienced by many rural areas in Ontario.

2.2 Motivations for Rural Residential Living

Factors which create the desirability for living in rural areas warrant exploration. Academics have argued the importance of governments and planners to have an understanding of

the motivations for rural living in order to create policies to protect and sustain these areas (Lokocz, et al, 2011; Davis, et al, 2007). These academic researchers suggest that the attraction, perceived benefits, and place attachment for living within rural areas can offer insights for undertaking the difficult task of defining rural character and the creation of policies for it. Further, as noted by Tilt, et al, “problems occur when policies aimed at protecting rural character fail to address how rural character is perceived by the community” (2007, p. 24).

There have been a number of key motivations for rural migration advanced by academic researchers. These motivations can be categorized into “pull” and “push factors” (Milburn, et al, 2010) whereby pull factors are positive factors which attract people to rural areas and push factors are the negative factors that repel people from urban areas. Some of the pull factors include: the desirability of open spaces and the rural landscape aesthetics (Lokocz, et al, 2011; Milburn, et al, 2010; Ryan, 2006, Joseph and Smith, 1981), privacy created by distances from neighbours and the increased space of larger lots (Davis, et al, 2007; Joseph and Smit, 1981) natural areas/features and wildlife (Lokocz et al, 2011); feelings of community and shared rural culture (Lokocz, et al, 2011); lower housing costs (Milburn, et al, 2010; Bryant and Mitchell, 2006); lower property tax rates (Milburn, et al, 2010); improvements to roads/road systems (Milburn, et al, 2010) and mobility (Joseph and Smit, 1981); advancement of telecommunication and technology systems (Milburn, et al, 2010; Bryant and Mitchell, 2006); and increased personal income (Joseph and Smit, 1981). Push factors, which are somewhat a mirror of the pull factors, may also include such influences as: a rural alternative to the negative perceptions of urban lifestyle such as noise, pollution, and increased urban traffic/congestion resulting in longer commuting times (Lokocz, et al, 2011; Davis, et al, 2007).

2.3 Impacts of Rural Development

The development of land through new incremental single residential lot creation can result in significant impacts on rural areas. Its long term effects have often resulted in what has been termed as a form of sprawl into rural areas. Rural sprawl has been characterised as different in its form and impacts from that of urban sprawl, where such development typically occurs on the periphery of urban areas.

Rural sprawl is identified and defined by its scattered and ribbon development form which leaves distances and large areas between developments and extends into the more rural and remote areas. The main components of rural sprawl include its low density residential development, reliance on vehicular transportation for access and its conversion of natural and agricultural areas (Thompson, 2013; Burchell, et al, 1998). This form of non-farm development is “commonly characterized by isolated residences on large lots, and by small pockets of dwellings, in some places well removed from existing rural settlements, elsewhere in close proximity” (Joseph and Smith, 1981, p. 211). It often occurs in the formation of strips or ribbons of residences along a road in the rural area (Prince Edward County, 2012).

A review of research in the area of rural development and sprawl demonstrates some of the key long-term consequences of extensive and low-density scattered residential development affecting many municipalities today. In research on the motivation and resulting impact of rural migration, Milburn, et al suggest that:

Rural areas are under growing strain from urban expansion and sprawl, population migration (as a result of changing lifestyle preferences and an aging population), technological innovations which allow ex-urbanites to telecommute, and economic pressures to consolidate farmlands, resulting in smaller farming populations in rural areas, and difficulty sustaining local communities. (Milburn, et al, 2010, pg. 27-28).

The potential impacts of this type of scattered rural residential development include: agricultural, public health and environmental social implications; municipal financial impacts; and rural aesthetics and culture.

2.3.1 Agricultural, Public Health and Environmental Social Implications

The creation of residential lots in rural areas, particularly larger-size lots, can have negative consequences on the health of rural communities and can result in significant social costs. As suggested by Milburn et al, “non-rural development has the potential to catastrophically impact on the sustainability of both our ability to feed the population and the health of our environment in general” (2010, p. 42). Rural residential lot development can result in the fragmentation of farm land and the removal of quality soils from their capabilities to be used for agriculture (Joseph and Smit, 1981; Caldwell et al, 2012). Such development can ultimately have an impact on food security and the viability of agriculture as such lands are converted into residential uses. Quality soils are a finite resource and, as suggested by Caldwell et al, only approximately 5% of the Canadian land base can be considered to be lands capable of good agricultural production based on soil and climate considerations (2012).

New lot development in rural areas is not as restrictive as it is areas of prime-agriculture. The opportunities for the creation of new residential uses in agriculturally designated areas have been extremely limited through Ontario’s Provincial Policy Statement (PPS) 2005 and 2014. The province has increased this control through the removal of farm retirement lots or consents for full-time farm employees as was permitted prior to the 2005 version of the PPS. The farmland protection policies of the PPS are reflected in Official Plan policies in agriculture designations. Prime agricultural lands are defined in the PPS as Class 1 to 3 Canada Land

Inventory type soils areas and specialty crop areas (PPS, 2014). Agricultural designations are usually delineated through evaluation systems such as the Agricultural Land Evaluation System (ALES) and Land Evaluation and Area Review (LEAR) (OMAFRA, 2014). While there is typically a prevalence of quality soils in agricultural areas, areas and pockets of good soils can also be found within rural designations, although at a much more limited and scattered form than found in agricultural designations. Notwithstanding, there remains significant rural lands which are capable of agricultural use that are not being protected to the same extent as those found within agricultural designation policies. While the agricultural capabilities of rural lands may be more limited, the further fragmentation of these rural soils area can reduce their potential for farm use, even if such use is only at a small-scale farming level.

The conversion of rural lands to residential uses can also result in an overall increase in value of agricultural land. This can render it difficult for farmers to afford to maintain, or increase, their current land holdings (Joseph and Smit, 1981) as residential development interests move into rural areas and occupy rural lands. It can also result in more costly and larger, extensive agricultural operations as farmers seek to ensure the sustainability of their operations and livelihood.

In addition to the removal of potential farm lands from agricultural production the development of new houses can result in conflicts between agricultural and residential uses (Joseph and Smit, 1981, Caldwell et al, 2012) in the rural area. One of the primary conflicts between these two uses is odour. The province has attempted to address this conflict through its development of the Minimum Distance Separation (MDS) formulae which is to be implemented at the municipal level. MDS calculates prescribed distances for expanding livestock facilities/manure storage areas to existing residential uses based on numbers/type of livestock

and type of manure storage. Likewise, it also provides setbacks for distances to these agricultural uses (livestock barns and manure storage areas) from newly created residential lots. Despite its intent to reduce farm and residential use conflict, MDS calculations only take into consideration odour issues associated with livestock barns/manure storage areas and does not address other potential conflicts which may include noise and dust nuisances associated with an agricultural operation (OMAFRA, 2013). New residential uses also essentially create a buffer around themselves, through the MDS distance guidelines, which may prevent area farmers from expanding their potential for new livestock to the extent desired if it can't be accommodated due to the existing residential uses occurring.

Other public health issues raised with rural residential development relate to the aging population. The aging population, currently being experienced by all of Canada, has implications on types of transportation services, health care access issues and other support service needs that rural areas are experiencing pressure to provide. In a recent study of the demographics of non-farm rural residents in Southern Ontario, it was found that the numbers of retired residents in the rural areas was increasing (Milburn, 2011). In addition to meeting the increased servicing needs of the elderly, there are also dangers created with increased response times for emergency service provision in rural areas. Travel distances resulting from scattered rural residences for these emergency services also often come at a higher safety and financial cost to municipalities with a greater geographic service area and distances between scattered residences and emergency/health service providers.

Increased residential development in rural areas also has long-term environmental impacts. Scattered development and its resulting travel distances between residences, employment and needed services/service centres result in an increased dependency on vehicular

transportation. This vehicle dependency creates greater air pollution and increases to traffic which ultimately results in heavier road usage and the need for increased road maintenance costs or pressures for new roads by municipalities (Ryan, 2006). The distances between rural residences, and other uses which service them, are often at a distance which renders pedestrian or cycling travel impossible. It is often not feasible or affordable for rural municipalities to offer transit services which are typically available in more urban areas. Not only does this vehicle dependency have negative environmental consequences, but such reliance on automobiles can have long term effects on the health of communities, as it restricts the ability for individuals to have active transportation choices.

Other environmental concerns that have been raised regarding rural development are its resulting impacts on the natural environment and wildlife habitat and corridors (Ryan, 2006; Buchan, 2006). Residential development can interfere with natural heritage system linkages as it can disturb the connectivity of these systems when land fragmentation is created with the injection of new and increased residential uses. Additionally, source water can be negatively impacted through the creation of ground water and surface water protection issues (Ryan, 2006; Buchan, 2004). This also creates environmental and public safety concerns given the fact that most rural areas are serviced by private wells and septic sewage systems (Ryan, 2006).

2.3.2 Municipal Financial Impacts

Municipal governments are currently facing serious financial difficulties. Most rural municipalities are “under severe pressures because of the scope of services provision, the economics of scale for service provision, and the expected levels of service” (FCM, 2006, p. 22). Some of the burdens of servicing and infrastructure costs have been managed by many

municipalities to date by opting to only provide minimum levels of service, by under-servicing, or by not repairing or replacing costly infrastructure (Burchell, et al, 1998). Increased rural residential development outside of developed areas may lead municipalities to consider servicing reductions for existing settlement areas. This potentially jeopardizes the long-term sustainability of these needed service centres (Caldwell, 1985). Settlement areas, which may include rural villages and hamlets, often contain existing residential, commercial and other uses which act to service the surrounding agricultural and rural areas (Caldwell, 1985).

The reliance of municipal governments on property tax as the primary form of revenue can result in financial vulnerability. Where there are changes in population through migration, or other demographic trends such as lower birth rates and an aging population, this can greatly impact the municipal tax base (Kelsey, 1993). Also, as previously highlighted, the aging population can result in new and increased financial pressures on rural municipalities which can include services such as retirement and nursing facilities and other services and transportation methods to allow more elderly residents to remain residing within their homes (Kelsey, 1993). While municipalities have access to other revenue streams, such as provincial transfer payments and grants and service user fees and charges, these sources are not always consistent or guaranteed. There are also provincial limitations placed on the amounts of available monies municipalities can generate from these forms of charges and fees. While there are charges available to municipalities to recover some of the capital costs of new development, such as through Capital Development Charges, municipalities may be opting not to implement these charges, or not charge the full amount, as result of pressures from developers (Tomalty and Skaburskis, 2003) or on the assumption that this will fuel additional development within their municipal borders. Additionally, in recent years, there has been a trend in reduction of the

provincial monies received by Ontario municipalities, without necessarily an off-setting reduction in the types and standards of service provision still required to municipally provide as directed by the provincial government (FCM, 2006).

The financial difficulties can be further exasperated if a local municipality experiencing increased residential development and the residential tax revenues generated are not covering the municipal costs for these uses (Kelsey, 1993). Rural communities may also be challenged by a lack of industrial and commercial uses and the historical trend of reduced agricultural uses occurring in these areas (Kelsey, 1993). This may be a somewhat different experience to urban areas who, while have higher servicing and infrastructure costs, typically benefit from more industrial and commercial taxes. Additionally, urban residential uses may be taxed at a higher rate, and have higher assessments on average, which may offset some of the costs of urban residential use and services.

Despite the potential long-term negative financial consequences of increased rural residential development, there is often a misconception by the public and municipal officials that increased residential development is desirable and a revenue-generating form of land use. Large rural open spaces may be viewed as a resource to be used to generate a perceived higher or better land use, particularly uses which can generate increased tax revenue through development (AFT, 2010). The cost of residential development to municipalities, in contrast to other forms of land use, has been extensively examined in the United States through Cost of Community Services Studies (COCS) primarily undertaken through the American Farmland Trust. Over 150 of these studies conducted to date have found that servicing costs for residential uses typically exceed their generated tax revenues, therefore resulting in a portion of their costs being carried by other land use categories such as agriculture, commercial and industrial uses (AFT, 2010). Two

similar type of financial analysis studies have been completed in Canada to date, in Red Deer, Alberta and Brighton, Ontario. A new similar type of study is also currently being conducted in Ontario through an initiative of the Ontario Federation of Agriculture (OFA) (B. Laforty, personal communication, July 11, 2014). The study conducted in Red Deer found that the municipal costs for providing services to the residential land use category far exceeded what is generated in tax revenues. Overall, the servicing of residential uses were ultimately being supplemented by the other land use categories of commercial, industrial and agriculture (Greenaway and Saunders, 2006). Similarly, the Brighton study concluded that residential land uses result in a negative net benefit to the municipality whereby servicing costs were exceeding residential property taxes. This study found a further relationship between lot sizes and development patterns. It was found that residential lots less than 2 acres in size, and lots that were geographically scattered, experienced the greatest municipal cost without adequate corresponding property tax benefits (MMAH, 1988). Density and distance appear to be key factors influencing servicing costs: whereby the greater the distance, the greater the servicing cost; and the higher the density, the lower the servicing costs (Coupal, et al, 2009). The effects of settlement patterns therefore have considerable influence and impact on municipal costing and financing (Scandlan, 2013). In a study of roads, school bus systems/routes and fire protection “fragmentary evidence for a relationship between the costs of providing services and the spatial form or residential development” was found (Joseph and Smit, 1985, p. 328).

Land development through single new lot development does not require, nor trigger, a requirement for financial analysis. This type of analysis is typically reserved for site specific large development proposals. Some municipalities have looked at the general costs of land use patterns of development as part of a comprehensive Official Plan review. The creation of one

new lot does not typically have much impact on municipal finances and, may in fact, benefit the municipality where there is existing infrastructure in the location of the new lot to be developed. It is scattered and isolated types development over extended periods of time that has long term financial and servicing consequences. Physical distances are created by this type of development whereby large areas and vacant lands are bypassed for development that extends further out into the rural areas which has a municipal financial cost (Holcombe, 1999). While not readily used in Canada, studies such as Red Deer, Brighton and the current OFA study, provide a tool for understanding the financial implications of residential development in rural areas. Given the often significant focus of economic viability by local politicians, these types of impacts may potentially offer a greater appreciation of the long-term financial consequences of residential single lot creation in rural areas.

2.3.3 Rural Aesthetics and Culture

Residential development in rural areas has a cumulative effect on the character and flavour of the rural landscape. The visual aesthetics of the countryside can become degraded with increased development and through the creation of new lots (Caldwell and Weir, 2002; Ryan, 2006) and it “is often the visual impacts of rural residential sprawl that is most apparent to local residents of these areas” (Ryan, 2006, p. 6). While no two rural areas and communities are alike, there are similar physical and cultural attributes which many rural areas have in common. It is often these visual landscape appearances of farmlands, woodlands, open spaces, recreation areas and other natural features which draw residents to seek a rural lifestyle alternative in the first place (Ryan, 2006; Milburn et al, 2010; Lokocz et al, 2011). Increased and scattered residential development over time can contribute to the loss of the rural sense of place. It has

been suggested that a rural lifestyle creates a community identity (Lokocz et al, 2011) and, as rural areas become more populated and new residential lots are created, this may have an impact on the social nature and cultural heritage of these communities. The process and regulating policies for new lot creation in Ontario is one in which applications are often considered on an individual basis often without a comprehensive approach to the cumulate effects on rural areas and its character.

3. New Lot Creation in Rural Ontario

Land in Ontario can be divided by public individuals or corporations by one of two means: through a plan of subdivision; or through the consent (severance) process. The typical used means for the development of new lots in rural areas is by consent. Consents are usually the creation of one or two new lots from a particular land holding. The consent process is a less costly and less onerous process than new lot development by means of subdivision. Plans of subdivision, due to their greater number of lots and more extensive development results, require a more thorough analysis of their impacts and usually require a number of studies to support them.

Historically, consents in rural areas were initially sought by farmers seeking to create a lot for themselves as a homestead or for relatives or other farm help (Hodge, 1986). Over time, rural lots have been increasingly pursued for strictly residential purposes. The increased demands for large rural residential lots have been sought as a means for providing an alternative to urban lifestyles and to take advantage of the perceived and actual benefits of rural living (Milburn et al, 2010). The development of new lots by the consent process can have long-term effects. The severing of a single lot is typically judged on its own merits against the applicable provincial and municipal policies that are in place at the time of the severance application. However, as suggested by Hodge, “few rural consents are denied anywhere, it seems. This is understandable when individual applications are being dealt with, but, regrettably, the accumulation of consent decisions can lead to unsatisfying and costly development for the community” (1986, p. 242).

The process for consents in Ontario is regulated provincially through the *Planning Act, R.S.O., 1990*, and its related regulations as well as the guiding development policies contained in

the Provincial Policy Statement (PPS). In addition, consents are regulated at the local municipal level primarily through Official Plans.

3.1 Planning Act

The *Planning Act* is the provincial legislation which provides the framework for the regulation of land use planning in Ontario. The Act, and its related regulations, regulate land use planning policy development and processes for the municipal levels. The process of creating a new lot by consent is regulated through Section 53 of the Act. An application for consent of a new lot is made to the appropriate land division authority. This authority is often the upper-tier municipality with an approved Official Plan, or single-tier municipality where they exist, unless the delegation of the approval authority has been granted to the lower-tier municipality. The Act also provides criteria for assessment consideration under Section 51(24) as well as conditions of approval that can be imposed under Section 51(25) which are applicable to the division of land, whether by plan of subdivision or by consent.

In addition to establishing the framework for land division, the Act also provides the authority for the province to issue policy statements which relate to municipal planning matters deemed to be of provincial interest under Section 3. More recently since 1997, the province has issued a Provincial Policy Statement which covers a wide spectrum of provincial policy interest areas. This statement is to be reviewed every five years. The most recent statement was issued April 30, 2014. Municipalities are required to be consistent with this policy statement and the numerous policies contained therein in their planning documents and decisions as per Section 2.1(5) of the Act. With respect to new development, Section 2(h) of the Act states that “the orderly development of safe and healthy communities” is one of the areas of provincial interest

and this is reflected in the Building Strong Healthy Communities section of the current Provincial Policy Statement (PPS) 2014.

3.2 Provincial Policy Statement (PPS)

The province's policy statement has a number of primary overall objectives: to provide policy for land use matters that are deemed to be of provincial interest; to provide guidance and direction to municipalities in their policy development and planning decisions; and to provide policy statements which are clear and accessible to municipalities, landowners and others with respect to land use and its development (MMAH, 2005). The policies in the PPS are to be read as a whole in their application to municipal planning documents and decisions.

Under the Building Strong Healthy Communities policy section, the PPS addresses Rural Areas within municipalities which are comprised of: agricultural lands; rural settlement areas; natural heritage and resource areas; and rural lands (PPS, 2014). The subset Rural Lands are defined in the 2014 PPS as being “lands located outside *settlement areas* and which are outside *prime agricultural areas*” (PPS, 2014, p. 48). The PPS prescribes that one of the means to fostering healthy rural areas is by “building upon rural character, and leveraging rural amenities and assets” (PPS, 2014, p. 9). The PPS, however, does not specifically offer a definition of “rural character.”

The decisions made by municipalities for the creation of new lots, whether by plan of subdivision or consent, must be consistent with the PPS. In rural areas, Section 1.1.5 of the 2014 PPS permits “limited residential development” in rural lands. (PPS, 2014, p. 10). Development is defined in the PPS as “the creation of a new lot, a change in land-use, or the construction of buildings or structures requiring approval under the *Planning Act*” (PPS, 2014, p. 41). The

permitting of limited residential development in rural areas was also contained within the previous 2005 PPS, however, neither document provides a specific definition of what limited residential means.

At the time the new 2014 PPS was issued by the province, a document titled the *Introduction to the PPS* was also released with the purpose of providing clarification and understanding for the municipal application of PPS policies, particularly to those areas outside of the Greater Golden Horseshoe (Ontario, 2014). The document offers some discussion around rural development which municipalities may wish to consider in their own policy creation and land use planning decisions. With respect to regulating limited residential development, it is noted that due to the diversity of rural areas, a definition is not provided by the province (Ontario, 2014). As an alternative, the province provides a number of factors that municipalities should consider in municipal policies regulating and/or defining limited residential development. A locally appropriate definition or policy is suggested to include consideration of the following:

- population;
- character;
- land use patterns and density;
- proximity of settlement areas;
- type and availability of infrastructure and public service facilities;
- presence of natural resources; and
- presence of natural heritage features and areas.

Ontario, *Introduction to the PPS*, 2014

These policy considerations are a greater offering by the province than previously given to local governments for direction in defining limited rural residential development. Additionally, the recent *Introduction to the PPS* acknowledges the negative impacts of scattered rural development stating that it “can cause significant problems, including servicing and environmental issues, and difficulty in providing residents with efficient and cost-effective

access to services such as education and medical services” (Ontario, 2014, p. 10). The document also notes the benefits of a more compact land use pattern on infrastructure and servicing costs as well as for creating more healthy communities through reductions in vehicle reliance and increased opportunities for walkable communities (Ontario, 2014). While this added document can be read along with the PPS to enhance a municipality’s understanding of the policy directives, it is noted by the author that it does not form part of the PPS. Where the PPS itself requires municipal consistency, the *Introduction to the PPS* was issued as a background document only, and may not be something that local governments are aware of or are required to consider and be compliant with.

The reasons for not specifically defining limited development at the province level was discussed by the author with a planner in the Eastern Regional office of the Ministry of Municipal Affairs and Housing (MMAH). It was noted that the PPS, and the overall general provincial approach for municipal development, should be undertaken “within a municipal context and based on their development pressures” (Dan Ethier, personal communication, November 3, 2014). The province has taken this stance based on the understanding that each municipality is unique and, as a result, the province “has left them with flexibility” to respond to their development needs (Ethier, personal communication, November 3, 2014). This provincial sentiment is also reflected in the *Introduction to the PPS* document wherein the province notes the reasoning for not provincially defining limited development was to provide municipal autonomy in this regard while also ensuring that any definition or related policies meet the intent of provincial interest contained in the PPS.

The new 2014 PPS is felt by the province to have a greater focus on the cumulative impacts of development which need to be considered in land use planning (Ethier, personal

communication, November 3, 2014). Despite the appreciation for potential negative effects of rural development, it is the provincial understanding that rural residential development can't be entirely restricted but that development is really to be directed to the settlement areas. As noted by the planner at MMAH, the province is "really working for a greater emphasis on growth management with respect to services" (Ethier, personal communication, November 3, 2013). There is a provincial understanding of a hierarchy of development, with settlement areas being at the top of the hierarchy for development, due to its ability to more easily provide and direct municipal services.

3.3 Official Plans

At the municipal level, the Official Plan is the long-range planning document used to guide local land use planning. The authority, process for approval, and content of Official Plan is regulated under Part 3 of the *Planning Act*. Official Plans may be adopted by upper-tier, lower-tier and single-tier municipalities and, in the absence of a lower-tier Official Plan, the respective upper-tier municipalities' plan will act as their Official Plan.

Municipal Official Plans contain goals and objectives to direct development as well as land use designations and related schedules. Policies for land development and division are also typically provided for in these documents. With respect to limiting rural residential development, the sections of a typical municipal Official Plan which are most likely to contain such policies are the rural designation policies and land division policies.

Rural areas as designated in municipal Official Plans are often defined as being lands outside of areas of prime agricultural areas, natural heritage or other resource areas. Typically they are comprised of, and are often specifically defined in Official Plans as being, areas of Class

4 - 7 soils as established by the Canada Land Inventory (CIL). Large areas and pockets of soils that are Class 1-3 soils are usually identified as areas of prime agriculture, or as identified through the use of a LEAR assessment, and are designated as such and have their own specific land division policies applicable which are more restrictive in recognition of their important agricultural potential.

As with all municipal planning, Official Plan policies are to be consistent with the PPS. Rural policies should therefore reflect that “limited residential development” is permitted in these areas as policies for limiting residential development, supporting rural character and rural landscapes are prescribed in both the 2005 and 2014 PPS. With respect to the division of land through consents, at the outset of this research it was assumed that consent policies for limiting rural residential development would potentially include typical and standard policy types found in Official Plan policies. Such consent policies within the Official Plan context were anticipated to include: the prescription of an eligibility date for the division of a landholding; policies regulating the maximum number of new lots a landholding is permitted; policies establishing a minimum or maximum lot size for new rural residential lots; and policies that define and/or limit strip development.

3.4 Summary

The preceding literature review and discussion of new lot creation process in rural Ontario examined why rural residential development should be limited and how land division is regulated. The discussed negative impacts of scattered residential uses in Ontario’s rural areas illustrates the importance of regulating this form of development and the provincial and municipal land use policy tools which exist to control it. The purpose of this research is to first

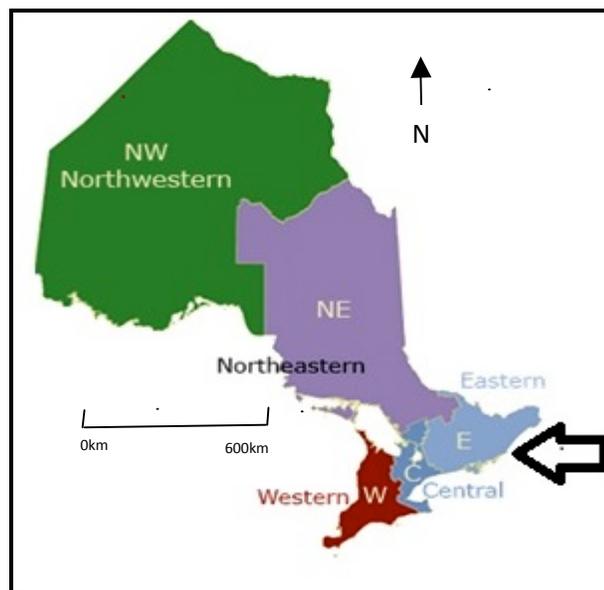
examine the types of consent policies typically found in existing Official Plans to limit rural residential development within the Eastern Ontario study area. Upon the establishment of the existing policy trends within this study area, policies which may be considered to be unique or alternative in nature will then be identified and further explored.

4. Case Study Methodology

4.1 Study Area: Eastern Ontario Region

The Eastern Ontario Region, as delineated by the Eastern Municipal Services Region of the Ministry of Municipal Affairs and Housing (MMAH) (see Figure 2), is composed of ten (10) upper-tier municipalities with ninety (90) lower-tier municipalities and thirteen (13) single-tier municipalities (MMAH, 2009).

Figure 2: Eastern Ontario Region Location Map*



* MMAH, 2011

In 2011, the Eastern Ontario region had a population of 2,005,288 containing 15.6% of the province's total population (Statistics Canada, 2014). Between the periods of 2006 and 2011 the Eastern Ontario region experienced a 5.9% population growth which constituted 13.6% of the total provincial growth during this time period (Ministry of Finance, 2013). It is projected that from 2012 to 2036 this area will continue to grow at a rate of 26.1% for this period with the Ottawa area experiencing the highest level of growth (Ministry of Finance, 2013). While it is

anticipated that most of the municipalities located within the Eastern Ontario region will grow over this period, the overall growth of the area will be slightly less than the provincial average being projected at 28.6% (Ministry of Finance, 2013). The region of Ottawa will account for the majority of this growth as it is anticipated that Ottawa will grow by 42.8% where the balance of Eastern Ontario is only expected to increase by 9.6% during this same period (Ministry of Finance, 2013).

The Eastern Ontario region was chosen as an appropriate regional study area due to it being located outside of special provincial planning policy areas such as the Greater Golden Horseshoe area and Northern Ontario. As a result, of being excluded from these special policy areas, land division in Eastern Ontario is only subject to the planning policy directives contained in the PPS and the geographically applicable local municipal Official Plan policies. Additionally, much of Eastern Ontario can be considered rural in its population and physical characteristics although it does contain a number of urban centres, most notably the City of Ottawa which had a population of 883,391 in 2011, representing 44% of the region's total population (Statistics Canada, 2011). While the City of Ottawa has a high density populated urban core, it is geographically large area with 90% of its land area being considered to be rural (City of Ottawa, 2008).

The study is directed at examining Official Plan policies of lower-tier and single-tier municipalities which relate to limiting residential development within rural designations. In consultation with the research paper's advisor, it was determined that twenty (20) municipalities would provide an appropriate study area for meaningful policy comparison. A random sample of twenty (20) municipalities was selected and urban municipalities, without any rural Official Plan designations, were omitted from the sample. In instances where the selected lower-tier

municipality did not have their own Official Plan, the upper-tier municipality's Official Plan was relied on in the study. This was done due to the lower-tier's use of the upper-tier municipal Official Plan in the absence of their own as required by the *Planning Act*. During the random sample selection process multiple lower-tier municipalities without Official Plans, and located within the same upper-tier municipality, were randomly selected. In consultation with the research paper's advisor, it was determined that in this circumstance only one of the lower-tier municipalities should be selected and further additional sample municipalities randomly selected. This was done to generate a wider capture of Official Plan policies for comparison and also to potentially increase the likelihood of identifying any distinctive and alternative types of policies. The list of the final selected twenty (20) municipalities in the study area is found in Table 1.

Table 1: Municipalities within the Eastern Ontario Region Sample Study Area

Municipality	Lower/ Single Tier	Population*	Official Plan Used	Municipal Official Plan Date
Township of Addington Highlands	Lower Tier	2,112	Lower Tier OP	2004 ^b
Township of Champlain	Lower Tier	8,620	Upper Tier OP for Rural Areas (Prescott-Russell)	2006
Municipality of Centre Hastings	Lower Tier	4,230	Upper Tier OP (Hastings)	2002 ^b
Township of Leeds & the Thousand Islands	Lower Tier	8,729	Lower Tier OP	2005
Township of Frontenac Islands	Lower Tier	1,548	Lower Tier OP	2011
Township of Laurentian Valley	Lower Tier	8,826	Lower Tier OP	2002 ^b
Township of Brudenell, Lyndoch & Raglan	Lower Tier	1,585	Upper Tier OP (Renfrew)	2002
Town of Gananoque	Single Tier	4,908	Single Tier OP	2009
Township of Beckwith	Lower Tier	5,404	Lower Tier OP	1989 ^a
Township of Otonabee-South Monaghan	Lower Tier	6,211	Lower Tier OP	2005
Township of Central Frontenac	Lower Tier	4,004	Lower Tier OP	2008
County of Prince Edward	Single Tier	22,752	Single Tier OP	1998 ^b
Township of Drummond-North Elmsley	Lower Tier	6,181	Lower Tier OP	2011
Township of Tay Valley	Lower Tier	5,239	Lower Tier OP	2000 ^b
Township of Loyalist	Lower Tier	14,590	Lower Tier OP	2014
Township of Lanark Highlands	Lower Tier	4,795	Lower Tier OP	2012
Township of South Dundas	Lower Tier	10,159	Upper Tier OP (Stormont, Dundas & Glengarry)	2005
Township of Edwardsburg-Cardinal	Lower Tier	6,169	Lower Tier OP	2010
Municipality of Highlands East	Lower Tier	2,662	Lower Tier OP	2003 ^b
Municipality of Dysart et al	Lower Tier	4,671	Lower Tier OP	2003 ^b

* MMAH (2009)

^a Updated since 2005 PPS

^b Not formally updated since 2005 PPS

4.2 Official Plan Policy Reviews

The review of Official Plans to identify policies to limit rural residential development examined two policy sections most relevant to new lot development in rural areas: the rural designation general policies; and land division consent policies. Where rurally designated lands exist within a municipality, Official Plans contain a section of policies outlining the overall objective and intent for rural lands as well as policies directing its future development. Policies for the division of land are also prescribed in Official Plans and are typically contained in a separate policy section. The consent policy section usually includes policies for the division of all lands located within a municipality as well as specifically providing select policies for the division of land by specific land use designation. The consent policies for rural designations are not as restrictive as those in the prime agricultural areas as the severing of residential lots within agriculturally designated areas is prohibited by the PPS.

To facilitate policy comparison of the twenty (20) existing Official Plans in the study area and their rural designation policies and consent policies categories, a Policy Review Matrix was created. This Matrix was used for the evaluation and comparison of the relevant Official Plan policies and can be found in Appendix 1. In the development of the Matrix, the author reviewed Official Plan policies to identify and categorize rural designation policies and consent policies frequently found in municipal Official Plans which have the underlying intent of preserving rural character and limiting rural residential development.

Through the research general rural designation policies which contain statements related to preserving rural character and the preservation of rural lands, the restricting and/or limiting of rural residential development and scattered development or similar wording were identified. The

research also sought to specifically identify any definitions of: limited residential development; scattered development and; rural character.

General consent policies contained within Official Plans were also the focus of this research. Consent policies intended for rural area application which have the effect of limiting or directing rural development were identified. The types of consent policy categories which were typically found in Official Plans include policies for: eligibility for consent consideration; maximum number of consents permitted; lot size requirements; strip/ribbon development policies and; infilling policies.

The quantification of rural designation and consent policies which currently exists in the Eastern Ontario study area provides a baseline for an understanding of the types of policies which were similar and frequently utilized. The research sought to further identify other policies in the Official Plans considered by the author to go beyond the scope of typically found rural designation and consent policies. These policies were categorized as alternative or unique policy approaches for limiting rural residential development.

4.3 Interviews

Upon completion of the Official Plan policy research, municipalities in the study area who, in the opinion of the author, had particularly strong language or were unique in their rural preservation or limited rural residential development type of policies were contacted for an interview. The key informant interviews were conducted over the telephone with the municipal staff planner. A total of five (5) interviews were conducted. These interviews were informal in nature and included a series of open ended questions.

In addition to the interviews conducted of local municipalities, a key informant interview was undertaken with a regional planner in the Eastern Ontario Regional District at the Ministry of Municipal Affairs and Housing (MMAH). The purpose of this interview was to identify other potential alternative consent policies currently existing within the Eastern Ontario region which may not have been captured in the sampling area.

5. Case Study Results

The policy research examined a random sampling of twenty (20) Official Plans. The policy review focused on two policy categories which capture the primary Official Plan policies related to limiting rural residential development and preserving rural character: rural designation general policies and consent policies. The summary of overall findings of this policy research is found in Table 2 on page 47.

5.1 Rural Designation Policies

A review of the general objective policies in the rural designations was undertaken to examine prevalence of policies for the preservation of rural areas and limiting new lot development. Notwithstanding the generality of these types of policies and their terms, they can capture the essence of rural character and how a municipality perceives its rural areas and its design. These types of policies can also support the underlying intent, and provincial direction contained in the PPS, to direct development to settlement areas. Evidence of policies is found in the review of general rural designation policies related to three main policy directives: rural character; scattered development and; limited residential development.

5.1.1 Rural Character Policies

Policies which use the terminology of “rural character” and its conservation were examined in the review. Eleven (11) of the Official Plans, 55% of the study area, include policies containing the words rural character or similar terminology. These policies typically reference a desire to protect the rural flavour and lifestyle of the rural designation and its natural scenic qualities and traditional landscapes including open spaces, natural heritage and

agricultural areas. Only one of the Official Plans specifically incorporated lot development and design principles into the development of rural residential properties in order to preserve the character of the area. Such rural residential design elements include the policy direction to:

(i) maintain a treed buffer of diverse native species between the residence and the roadway; (ii) place residences and buildings at the edges of fields, in order to reduce visual impact, to provide shelter from natural elements and to maintain open views and scenic areas; and (iii) place driveways along hedgerows, stonewalls or cedar fences, or at edges of fields and use a common shared driveway to lessen the development impact, wherever practical.

(County of Prince Edward, 1998, p. 132)

5.1.2 Scattered Development Policies

With respect to policies prohibiting or regulating scattered development, eight (8) Official Plans, 40% of the study area, have policies and wording discouraging this type of development. The intent of these policies is found to be for the prevention of land fragmentation and to protect the character of rural areas. Policies which include descriptions or definitions of the term scattered development are not offered in any of the Official Plans reviewed.

5.1.3 Limited Rural Residential Development Policies

Limited rural residential development is also not specifically defined in any of the Official Plans but, rather, limited residential development is implied to be accomplished by virtue of directing development to the settlement areas. It is noted that one of the Official Plan's consent policies relating to limited residential development is currently under appeal to the Ontario Municipal Board (Township of Lanark Highlands, 2012).

In the study area, 50% of the Official Plans are found to include policies containing the wording limited residential. The policies for limiting residential development were found to primarily speak to the impacts of development on the rural areas such as servicing, traffic,

groundwater management, drainage, etc.. Generally, the policies note that it is not the intent of the Official Plan to prohibit residential development, but rather limit it, in order to regulate its potential cumulative effects. Limiting rural residential development is only quantified in one policy example which states that 60% of new lot development is to occur in their settlement areas (Township of Edwardsburg/Cardinal, 2010).

Limiting rural residential development is also regulated through policies which monitor the number of available lots within the municipality. The Township of Drummond/North Elmsley provides a policy wherein they may choose to defer the creation of a new rural residential lot “should there be a trend towards increased rural residential development in comparison with fully-serviced urban residential development, bearing in mind that a three year supply of building lots needs to be maintained” (2011, p. 33-34). The application of this policy, however, has not been relied on to date as the inventory of vacant lots far exceeds the minimum building supply (K. Grenkie, personal communication, November 11, 2014).

Several of the municipalities permit limited residential development with provisions that the new development does not result in the interference of, or create restrictions on, agricultural uses. This is implemented partially through additional policies which direct residential development to areas of poorer quality soils, i.e., only permitting residential consents on Class 5-7 soils (Township of Frontenac Islands) or permitting consents on Class 1-3 soils within rural areas only for new/enlarged farm uses (Township of Drummond/North Elmsley).

5.2 Consent Policies

In conjunction with a review of general rural designation policies, consent policies for rural new lot creation were reviewed and summarized into categories with similar intents.

Policies found include the following categories: providing an eligibility date/maximum number of lots permitted; lot size minimum/maximum requirements; strip/ribbon development policies and; infilling policies.

5.2.1 Eligibility Date and Number of New Lots Permitted

The research examined whether there were provisions for an eligibility date for land division consideration and any maximum number of severances permitted from a particular landholding. Consent policies which contain an eligibility date, and limitation on the number of times a parcel can be divided, are utilized in part as a policy to provide equity to all landholders in being able to obtain a severance/consent. These types of policies also have the effect of restricting development by limiting a parcel's division potential. Policies which limit the number of severances a particular lot is eligible to create also has resulting impacts on minimizing strip development potential as it "reduces the fragmentation of rural land that resulted from historical severance practices" (City of Ottawa, 2008, p. 16).

Of the twenty (20) municipal Official Plans reviewed all, with the exception of two (2) Plans, provide for a standard set date wherein a lot would be eligible for consent consideration. In 90% (18/20) of the Official Plans there are policies that prescribe an eligibility date to regulate consent activity. In 45% of cases, the eligibility date is the date of approval of the current Official Plan. Eligibility dates appear to have been also selected based on the date of a previous Official Plan, particularly in cases where there had been an amalgamation, or based on the amalgamation date itself. One (1) of the two (2) Official Plans which do not establish a set date, alternately, require that in order for the lot to be eligible for division, it has to be an original Township lot (Township of Beckwith). The other Official Plan without a set date limits lot

division with the requirement that a lot cannot have been severed within the past twenty-five (25) years and requires a minimum time period of five (5) years between severance applications (Township of Otonabee-South Monaghan). With the inclusion of these alternative date approaches, all Official Plans were deemed to attempt to restrict consents based on dating criteria.

The number of new lots (excluding the retained lot) permitted from a landholding in existence as of the eligibility date are generally found to be limited to two (2) new lots (in eleven (11) Official Plans), three (3) new lots (in eight (8) Official Plans) and only one (1) new lot (in one (1) Official Plan). There are policies found that permit additional lots beyond this general limitation in several municipalities. For example, in the municipalities of Central Frontenac and Lanark Highlands, an additional lot severance may be considered, under limited circumstances, where the property owner has owned the property in excess of ten (10) years. Drummond/North Elmsley also permits consideration of further lots if it is a large lot (no definition is provided of a “large lot”) and has frontage on two or more roads. Although the municipality of Dysart et al permits up to three (3) new lots off a land holding existing as of the date of the plan, this Official Plan offers a more unique, long-term restrictive planning policy with respect to future consent eligibility. It states that there is no intention of the municipality to alter the number of new lots permitted from a land holding “in any subsequent plan” (Municipality of Dysart et al, 2003, p. 26).

5.2.2 Lot Size

Any minimum or maximum lot sizes for new residential rural lots was also identified in the Official Plans reviewed. In the study area, nineteen (19) municipalities, or 95% of those

studied, have policies providing for a minimum lot size for a new rural residential lot. In policies where the exact size is not prescribed in the policy itself, it is noted that the minimum size should be appropriate for the use proposed or adequate in size for the long-term provision of services. As a result, the lot size for a new rural residential lot under such circumstances is regulated under the minimum requirements of the applicable Zoning By-law. The municipality of Otonabee-South Monaghan, alternatively, offers a policy for a maximum lot size which “should generally not exceed 3000 square meters” (0.74 acres) for a new residential lot unless site circumstances require otherwise (2005, p. 49). The intent of this policy is likely to restrict the fragmentation of rural lands and the amount of land being taken out of rural/agricultural potential by its conversion to residential use.

Lot configuration impacts are raised in two (2) municipal Official Plans. This policy is similar in both instances wherein the lot’s depth is to be limited to no more than four times the frontage. The basis for this requirement is to restrict potential impacts on natural resources, encourage the efficiency of municipal servicing, energy and water management as well as encourage the new development to “blend” with existing area development (Township of Laurentian Valley, 2002; County of Renfrew [Brudenell, Lyndock & Raglan Township], 2002). This type of policy also lends itself to discouraging ineffective use of lands where the new residential lot size depth is less likely to be sized in excess of its residential land use needs and thereby not removing additional land out of other potential uses such as agricultural, tree cover areas or open space uses.

5.2.3 Strip / Ribbon Development Policies

The policy review also resulted in a review of policies restricting strip development in rural areas. Policies were identified which had the effect of limiting and restricting strip and ribbon development and whether any definitions of strip development were provided. Strip development is characterized as a type of settlement pattern which results in a string or ribbon of residences along a particular road. It has the effect of producing a visual effect of higher residential density and extending development. Strip development also contributes to land fragmentation in the rural areas and results in the removal of land from potential agricultural production (Prince Edward County, 2012).

Consent policies which attempt to regulate strip and ribbon development are prevalent within the study area. It was found that fifteen (15), or 75%, of the Official Plans contain policies related to strip development with most of the policies stating that new development cannot result in the creation or extension of strip development. One of these Official Plans, Leeds & the Thousand Islands, only speaks to discouraging strip development on County roads and is silent on strip development on local Township roads. Definitions of strip and ribbon development seem to be generally lacking resulting in an absence for quantifying what strip development means. Only two examples of strip development, which expanded beyond simply using the terms of not to create or extend strip development, are found in the study area. In the case of Laurentian Valley, their strip development policy details the potential negative effects of this type of development:

Ribbon development means the unnecessary or undesirable extension of development in a ribbon or strip-like manner along existing roads which may cause undue financial burden for the provision of services, or which otherwise does not facilitate proper and orderly development of the municipality (Township of Laurentian Valley, 2002, p. 18-2).

Only one strip development policy exists in the study area which was deemed sufficient enough in detail to be considered a definition of strip development. This policy provides the greatest level of detail and guidance for determining whether a new lot development will result in strip development is found in the Township of Drummond/North Elmsley, Section 6.32.3, which states that:

In determining whether a consent will result in the creation or extension of strip development, the visual impact of the proposed development shall be assessed. Specifically, consents should not be granted on flat, open land, but rather in areas having natural tree cover, scenic views and/or rolling terrain where natural landscape features prevent extensive views of development, especially along straight stretches of road. Further, the existing vegetation and terrain should be disturbed as little as possible.

(Township of Drummond/North Elmsley, 2011, p. 63)

While this strip development policy is more descriptive than other policies found in the study area, the planner at Drummond/North Elmsley, notes that there is some degree of subjectivity in this policy and consents have been very rarely, if ever, denied on the basis of this policy (Grenke, personal communication, November 11, 2014). Even if the policies are not necessarily currently being relied on in a strict interpretation due to lack of current growth pressures, there is benefit in having these policies in place should development trends change (Grenke, personal communication, November 11, 2014).

5.2.4 Infilling Policies

The policy review also resulted in the identification of infilling policies and definitions thereof. Infilling policies permit the intensification of residential density by permitting development between existing closely built residences, usually located on the same side of a road. Infilling can have cumulative negative effects on rural character as it permits increased settlement pattern density in rural areas. However, it can also serve to direct and encourage

development to existing built up areas and may potentially reduce development from being more scattered and dispersed. Definitions of infilling can play an important role in Official Plans to ensure that policies permitting infilling do not result in excessive development and the erosion of the rural nature and aesthetics of a particular area.

Consent policies which permit infilling development in the rural designation are found in thirteen (13) or 65% of the Official Plans. Of these Official Plans, seven (7), 35%, of the policies have accompanying definitions of infilling. The majority of the policies define infilling as being the creation of a new lot between existing residential development located on the same side of a road. The maximum separation distance for an infilling lot generally provides that the existing residences be not separated by more than a specified distance ranging from 100 metres (328 feet) to 125 metres (410 feet). The Township of Beckwith's infilling policy provides a further requirement where infilling needs to be located across the road from at least two residential lots. Only one (1) of the seven (7) Official Plans with an infilling definition does not specifically prescribe that an infilling situation is one which is between already developed residential properties (Township of Centre Hastings). In this case it is assumed that infilling could potentially occur in-between vacant lots. Only three (3) of the Official Plans are found to further expand upon the limited intent of infilling, whereby it should not unduly extend developed areas and have a negative effect on the rural character of the rural designations.

**Table 2: Study Area: Rural Policy and Consent Policy Summary
(Random Sampling of Twenty (20) Official Plans in Eastern Ontario Region)**

		Number of Official Plans with Policy	Percentage (%)
Rural Policies	Scattered Development Policies	8	40%
	Rural Character Preservation Policies	11	55%
	Limited Residential Policies	10	50%
Consent Policies	Eligibility Date/Limitation on Number of Lots	20	100%
	Minimum/Maximum Lot Size	20	100%
	Strip Development Policies	15	75%
	Strip Development Definition	1	5%
	Infilling Policies	13	65%
	Infilling Definition	7	35%

5.3 Other Alternative or Unique Land Pattern Policies

This research also sought to identify other notable regional policies that went beyond this usual policy scope within Eastern Ontario. While a few exceptions of stricter or more extensive versions of policies were found in the sampling, overall, evidence of unique or alternative development policies is absent. To explore whether alternative approaches are occurring within the region, but were not captured in the sample area, an interview was conducted with a regional planner at the Ministry of Municipal Affairs and Housing (MMAH). This interview sought to potentially identify unique or alternative policy approaches which have also been the subject of considerable academic research.

Academics have offered a number of alternative approaches for rural development and land use patterns to offset the negative consequences of extensive residential development and its resulting rural sprawl. Burchell and Mukherji (2003) refer to current sprawl-like residential development patterns as conventional development and discuss the merits of planned

development and managed “smart” growth approaches. “This type of development seeks to contain most new growth around existing centres and limited development in rural and sensitive environmental areas” (Burchell, 1997, p. 160). Scattered development is reduced through compacting residential density to restrict rural sprawl and its resultant municipal fiscal impacts. Smart growth approaches emphasize efficient land use and consideration of appropriate development in order to protect natural resources.

Residential clusters and conservation subdivision developments have been advanced as a alternative form of rural residential development (Arendt, 1994; Arendt, 1997). In this form of development, residential uses are internally compacted within the development to provide for large areas for open space and natural resource conservation areas. These development clusters may be potentially coordinated with other developments to provide green space linkages and corridors (Arendt, 2004). This approach has been advanced for not only environmental reasons but to also preserve the traditional rural landscapes, mitigate conflicts with agricultural uses and reduce costs for municipal infrastructure and servicing (Arendt, 1997).

Other rural development strategies suggested by academic researchers include gradual development approaches. In gradual development “new development should be gradual and blend in with the surrounding developed and natural landscape to weaken perceptions of change and loss of rural character” (Tilt, et al, 2007, p. 24). Residential uses are directed in close proximity to existing built-up areas/settlement areas. This type of development would need to occur under limited circumstances such that it does not result in strip development or further sprawl. The Ontario application of this approach may be somewhat challenging if it results in the appearance of extending existing settlement areas which is not encouraged by the province and may, in fact, conflict with the PPS.

Evidence of some alternative policy development approaches within the Eastern Ontario region were identified through the interview with MMAH. The Ministry was canvassed to provide examples of municipalities who demonstrate best practices and progressive policies that raise the bar regionally for limiting rural residential development. The municipalities identified by MMAH include City of Quinte West, Township of Athens, Township of North Grenville, City of Ottawa and the Township of Elizabethtown-Kitley. The unique policies of these municipalities were categorized into three policy trends: caps on rural development; definitions and policies regulating density patterns; and cluster developments.

5.3.1 Policy Caps on Rural Development

Policies which specifically limit the number of new rural residential lots are found in the Quinte West, Athens and Ottawa Official Plans. In the Quinte West, new lot creation is very restrictive in comparison to the municipalities in the study area. Quinte West limits rural residential consents to just one lot for an existing lot of record and states that “no further severance will be permitted from either the severed or retained land” (City of Quinte West, 2013, p. 194). The division of previously severed lots are also to be generally discouraged and the majority of residential lot development is to occur in the settlement areas (80%) with the balance in the rural areas (20%) (City of Quinte West, 2013).

Specific number caps for new residential lot creation to regulate rural development are utilized in Athens. Athens has a policy limiting the number of residential consents, outside of settlement areas, to a maximum of 32 lots (or 40% of the total number of residential consents) within the 20 year planning period of their Official Plan (Township of Athens, 2010). The consent limit is based on anticipated growth projections and, as this municipality is mostly urban

composition, this policy assists to direct the majority of its new development (60%) to occur within its settlement areas.

Ottawa is also limiting development through a current cap on any new rural subdivisions. Notwithstanding other policies in the plan which permit rural and conservation subdivisions, the City has a moratorium policy on rural subdivisions for a five year period from the date of the Official Plan, unless an Official Plan amendment is filed to remove the moratorium. The new subdivision moratorium remains in effect to-date as the City is trying to direct the majority of development to its urban core (Ethier, personal communication, November 13, 2014).

5.3.2 Definitions and Policies Regulating Density Patterns

Density controls through definitions of strip development or density policies restricting the number of new of residences within a certain road distance can be used to limit development. While the majority of municipalities within the study sample area have policies for restricting the creation/extension of strip development, no strong definition or quantification of strip development was found. The current Official Plans of North Grenville and Quinte West include definitions for strip development. North Grenville describes strip development as:

“a series of four or more developed or undeveloped residential lots located on one side of a public road within a 300 metre length along the public road. The 300 metre distance shall be measured between the two lot lines located at either end of the strip. No new residential lot shall be created within a 300 metre distance of a strip residential development located on the same side of the road”

(Township of North Grenville, 2009, p. 141).

Quinte West also provides a definition of strip development, somewhat similar to North Grenville, wherein strips are defined as five (5) residences on one side of a road within a 300m length of road and no new lot creation is permitted within a 300m distance of area of strip

development (City of Quinte West, 2013). In addition to a strip development definition, Quinte West also has a policy and definition for limiting development where it occurs in a cluster formation. This policy states that:

Section 12.12.2.2,

An application for Consent that intensifies or further clusters strip development shall not be permitted. For the purpose of this Plan, a cluster is defined as a series of ten (10) or more developed or undeveloped residential lots measures from the four corners of the proposed lot to a point 150 metres away in all directions. No new lot shall be created within an area of cluster development. (City of Quinte West, 2013, p. 195).

The provision of this type of definition was not evident in any of the other Plans reviewed in this research and provides a unique concentration policy for regulating limited development.

An additional policy that regulates density was identified in Elizabethtown Kitley's Official Plan. This Plan contains a consent policy which restricts density with the intent to preserve rural character and limit rural residential development. The policy states that:

Section 5.2.3, 9.

A consent for creating a new lot shall generally have regard for an average density policy measure which attempts to limit development in the rural area to approximately four dwellings, structures or accesses (both existing and potential) per side of road per kilometer. Where required, as in the case of a short road or a cul-de-sac, a pro rate calculation shall be used. The calculation shall be taken from the centre of the proposed lot to be created.

(Township of Elizabethtown-Kitley, 2006, p. 83)

In policy application, the measurement is taken from a half kilometer in each direction from the centre of the new building lot to be created. The rationale for this policy stemmed from a desire to provide policy parameters by which to assess severances to preserve rural character and limit scattered development. The basis of the numbering policy resulted from previous background work undertaken for Elizabethtown-Kitley's Official Plan (pre-amalgamation) (B. Kalivas, personal communication, November 10, 2014). Roads in the Township which typified

rural countryside living and atmosphere were identified, by the Official Plan working group at that time, and the number of developed lots were tabulated and averaged out over the number of roads identified (Kalivas, personal communication, November 10, 2014). The inclusion of the wording “approximately four” provides some flexibility to this policy’s application. The average density policy measure is felt to be an effective tool in meeting rural character objectives, in limiting scattered development, and provides a less arbitrary means of assessing rural consent applications (Kalivas, personal communication, November 10, 2014).

5.3.2 Cluster Development Policies

Cluster developments policies may be used to restrict rural sprawl and preserve the agricultural uses and natural heritage which exists in rural areas. Evidence of this type of policy approach was found through discussions with MMAH. For example, North Grenville offers a cluster development policy within its rural designation. Where land division through consent is generally limited to one or two lots, this cluster development is defined as “a grouping of three to seven lots (not including the retained parcel)” (Township of North Grenville, 2009, p. 147). This type of development is a modified version of Arendt’s conservation clusters where residences are grouped together at a higher density and leaving larger areas for open space and natural resource areas. The rationale for offering this form of alternative development “is to direct housing away from public roads, reduce the visual impact of strip development, and increase the financial viability of scattered rural residential development” (Township of North Grenville, 209, p. 147). The negative financial implications of scattered estate residential lots may be one of the most important factors for encouraging this development form (Simon, personal communication, November 10, 2014).

In accordance with provincial growth management principles, North Grenville caps the number of residential lots within these developments to 150 within the twenty-five year planning period of the Official Plan (Simon, personal communication, November 10, 2014). These cluster developments are also to be accessed by a private internal road and have a number of policy parameters for residence placement to encourage rural aesthetics. These requirements include setbacks from other area public roads or, alternatively, the provision of vegetation or topography for visual screening to be ensured through site plan control (Township of North Grenville, 2009). Additionally, the cluster developments are permitted to include common ownership areas which can be used for recreation, open space and conservation (Township of North Grenville, 2009, p. 148).

Based on lessons learned through implementation, the current North Grenville policy allows for a lot size reduction in building lot area to as little as 0.4 ha per lot provided that the overall net density of 1 ha per lot is achieved (Simon, personal communication, November 10, 2014). The rationale for the reduction is to allow for the provision of shorter private roads to render such developments more financially feasible (Simon, personal communication, November 10, 2014). The attractiveness of clustering as an alternative form of development may however be contingent upon two factors: the lots being able to achieve a market value such that it is financially viable in relation to development costs, such as private road, etc. and; the depletion of the existing inventory of vacant lots in the area (Simon, personal communication, November 10, 2014).

Through consultation with North Grenville, similar clustering consent policies are found in the Township of Mississippi Mills. Mississippi Mills was the first municipality to implement this type of policy in Eastern Ontario (Simon, personal communication, November 10, 2014).

The Official Plan notes that this development approach was created as a pilot project and initially capped at 40 residential lots to be reassessed under future Official Plan review (Township of Mississippi Mills, 2005). Under the cluster lot development policy, clusters of three to five lots may be developed by consent and are to be serviced by a public road (Township of Mississippi Mills, 2005). While it has a smaller maximum number of lots permitted in the cluster development than in North Grenville's version, the policies are similar in nature. Both require an overall lot density of 1 ha per residential lot, require setbacks from public roads, provide parameters for visual screening and allow for the inclusion of common areas for recreation, open space, etc.

The alternative development approach of conservation subdivisions are also found in the general rural area designation of the City of Ottawa. This type of development, however, is through the subdivision process and not by consent. The overall land use pattern of this development seeks to reduce the residential footprint of these developments and encourage the conservation of "existing areas of the natural environment and open space, preserving rural character and enhancing ecological linkages and networks" (City of Ottawa, 2003, np, Section 3.7.2., 9.). These conservation subdivisions may permit a reduced lot area as normally required in the general rural areas of 0.8 ha to facilitate the conservation goals of the development (City of Ottawa, 2009). In order to qualify as a conservation subdivision it must "contain a component of the natural heritage system or feature of the landscape of the rural areas, which is to be preserved and zoned accordingly (City of Ottawa, 2003, np, Section 3.7.2.,9, a.). In addition to the ecological and rural aesthetic benefits this type of development can encourage, the City of Ottawa may also be encouraging such a development form of compact density for financial reasons. Ottawa has demonstrated an interest in the implications of the settlement patterns on

municipal finances with the completion of an impact analysis in 2009 and further updated in 2013. These studies have shown rural residencies to have a 15 per cent higher servicing cost than the City-wide average (Hemson, 2009). While outside of the scope of new lot creation by consent, these developments are to occur through the subdivision process. The application of this type of development through consent might be possible should restrictions be placed on the number of new lots permitted through this process as is found in North Grenville and Mississippi Mills.

5.4 Summary of Findings

The study in Eastern Ontario illustrates a regional trend in the adoption of similar policy categories for limiting rural residential development. The findings, which represent a snapshot in time, suggest the traditional-type policies remain the most prevalent for rural character preservation and limiting development. Policies in the rural areas primarily include policies for: prescribing minimum lot sizes and eligibility dates for land division; strip development policies and; allowances for infilling. Encouraging development to settlement areas, through infilling and other policies, has an underlying intent of limiting scattered rural development. The intensification of density in rural service centres and settlement however, may not be pursued, as it does not provide the lifestyle choice desired in seeking a country lifestyle. In the absence of definitions for strip development and limited development, reliance on these standard policies may ultimately result in further rural land fragmentation as many rural lots may potentially meet the division criteria minimums.

More strictly defining limited development and rural character may reduce rural consent eligibility. Examples of policies which extend beyond the parameters of the typical consent

policies were found to be policies which include more descriptive terminology of characteristics and attributes of the rural areas to be preserved. Other more extensive policies found relate to restrictions on lot size and depth or the prohibition of residential development in areas of quality soils. Alternative approaches appear to an exception rather than a rule and were essentially absent from the random sampled study area. These alternative forms of policies, only identified through contact with the Ministry, are found to be policies which provide a number/cap on residential lots, limiting density through strip development definitions and density counts and cluster development consent policies.

6. Discussion

The provincial and municipal governments have implemented policies to limit the extent of rural residential development, however, considerable difficulty arises in the task of clearly defining and implementing these policies. The concepts of rural character and limiting rural residential development are somewhat ambiguous terms and may mean different things across different geographic areas and regions. Conceptualizing what “rural” means requires consideration of the physical elements of a local area’s rural design, scale and landscape elements (Arendt, 1994). This can pose a significant challenge given that physical, cultural and social attributes can vary greatly not only between geographic areas, but also between opinions of various levels of governments, politicians, planners, developers and residents. Given the rural differences existing between communities and regions there may be a serious fallacy in any proposed application of a one-size-fits-all approach to the development and application of rural development and preservation policies.

Differences also exist at the higher provincial level of government, who formulates the overriding general policies, and those at the lower-levels of government who are ultimately challenged with the task of implementing and developing specific policies that affect local communities and citizens (Pollock-Ellwand, 2001). Pollock-Ellwand (2001), in her review of landscape policy in Ontario, examined the difficulties in linking land use planning policy and practice and notes “landscapes continue to be vulnerable in this province’s land use planning because of a gap in understanding about the concept and how it should be planned for” (Pollock-Ellwand, 2001, p. 2001). Pollock-Ellwand (2001) found that there is difficulty establishing consensus and the concept of landscape as “if it is to be protected in the land use planning process – a process that deals with physical units and zones – something must be identified,

bounded and measured” (Pollock-Ellwand, 2001, p. 106). Policies for the preservation of rural character and limiting development may be challenging to implement in the context of new rural residential lot creation if they are too vague in their wording. Additionally, as has been suggested by Lokocz et al, there is importance in incorporating place attachment and engaging community in policy development to define and regulate rural areas (2011).

The development of policies is not solely contingent on community preferences. Based on the interviews conducted local political will, particularly at the time of an Official Plan review, has considerable influence on the types of policies selected. Where there is political appetite for limiting residential development strong policies are more likely to occur. As raised by one planner during an interview, in the recent 2014 municipal election, the “opening up” of consents in a future Official Plan review to encourage more rural development was a political platform raised by several candidates who were running for election (Kalivas, personal communication, November 10, 2014). In this particular case, it demonstrates a continued political belief that new residential development benefits the community as a whole and the common potential misconception that residential uses overall improve municipal finances. Municipalities are further challenged in limiting new consents if there is no interest developing on the existing building lot inventory and if the political climate is leaning towards increasing residential development and rural services.

Planners are challenged in the implementation of rural preservation and limited development policies as demonstrated in the interviews conducted. As evidenced in the sampled study area there is a clear absence of land pattern and residential development design principles for preserving rural character. This may result from what is suggested by Davis, et al, that “at present there is no universally accepted settlement form for exurban development that guides

planners” (2007, p. 55). Lack of definitions, and policies that are vague or subjective, can result in variations of interpretation even between planners. Policies with stronger language that can clearly guide the assessment of consents may have more merit for the community.

Rural lifestyle preferences cannot be accommodated by strictly directing development to settlement areas. Communities may wish to give consideration to alternative development approaches or a more comprehensive review of their policies to limiting residential development. There may be merit in considering other forms of residential design principles and development patterns, as advanced by academics, and currently utilized in some municipalities in Eastern Ontario. Alternative development patterns at a larger scale or greater density may be more planned and controlled by the municipality through the initial planning process versus unchecked development occurring over time through the consent process.

7. Conclusion

One of the primary areas of research in the body of literature on rural residential development relates to its potential impacts. The research has demonstrated the negative implications of this type of cumulative development and these impacts have been reflected in provincial PPS and municipal Official Plan policy approaches. Despite this research, the negative impacts, in areas such as agricultural, environmental, social, cultural and financial, may not be aptly understood by local policymakers. This was evident through the interviews conducted wherein it was generally expressed that residential development continues to be viewed as a positive and beneficial form of development in rural areas. Development through the severance of new residential lots is still seen as financially beneficial to municipalities to increase their tax revenue base. There does not appear to be an understanding that the creation of new residential lots may, in fact, have negative financial consequences where tax revenues do not cover servicing expenditures as illustrated by the research in this area and the numerous COCS studies undertaken.

Provincial policy and the general findings in Eastern Ontario demonstrate recognition that there can be limited residential development permitted in rural areas. The policies in this specific region overall rely primarily on the traditional and typical categories of policies for limiting development. While the 2005 and 2014 PPS prescribes that residential development is to be limited in rural lands, in the review, only half of the Official Plans used policy wording including reference to limited residential. Despite the lack of explicit wording other policies are found to be in place for regulating development. These other policies and, ultimately their ease of implementation, may not be as clear and concise as they could potentially be. Additionally, there may be evidence that local interest drives the adoption of specific limited development

policies. In the review, eight (8) of the Official Plans have not been updated since of the 2005 PPS. Of these eight (8) Official Plans, pre-dating the 2005 PPS, four (4) still contain policies specifically referencing limiting residential development. The previous 1996 PPS (amended in 1997) did not include a specific policy direction for limited rural residential development. This provincial direction was more inferred through the PPS policy for cost efficient development that “urban areas and settlement areas (cities, towns, villages and hamlets) will be the focus of growth” (PPS, 1996, amended 1997, Sec. 1.1.1(a)). The inclusion of these type of policies, outside of the more clear direction of the 2005 and 2014 versions of the PPS, suggest that a community perspective of development plays a role in the policy type and strength.

There is evidence of more recent municipal policies which attempt to define and more strictly regulate development and also offer development pattern policy alternatives. Where these unique policies exist, through the interviews it was found that modifications to policies have been made in order to ensure that the development pattern approaches are locally appropriate. The market value of residential lots in the Eastern Ontario region renders small rural clusters of development difficult to implement given the infrastructure and upfront costs to be borne by a developer. The modification of the lot pattern development to facilitate reduced infrastructure costs, such as reducing lot sizes and frontages (provided overall development density is maintained) to achieve shorter roads, has been an attempt to make this type of alternative development more economically achievable and desirable to potential developers.

The region’s policy trends and unique policies currently in existence may be of interest to municipalities and planners in their future consent policy development. Creative communities, who seek to protect their rural character and have recognized the inherent value in that, may wish to explore these other policy opportunities. The application of a comprehensive approach for

rural and consent policy development, and the incorporation of alternative development principles and design, have potential to mitigate some of the negative effects of development and encourage the preservation of the rural countryside.

This study offers a view of existing policy within a regional context, however, it does not examine the implementation of these policies and their effectiveness in actually limiting rural residential development. Such analysis would require a review of consent activity to determine if these policies are being enforced in land division decisions and the resulting effects of new development on the rural landscape. There is a need for further study and evaluation of the outcome of policies to ensure that they are resulting in the desired effects of limiting residential development in rural designations and not resulting in more dispersed overall development. Permitting development without strict density control and strip development policies may potentially result in pushing development out to more remote rural areas and policymakers should be mindful of such potential implications.

8. References

- Alasia, A., Statistics Canada (2010). *Population Change Across Canadian Communities, 1981 to 2006. The Role of Sector Restructuring, Agglomeration, Diversification and Human Capital (21-006-X)*. Rural and Small Town Canada Analysis Bulletin, Statistics Canada, Vol. 8, No. 4. R. Bollman (Ed.), Retrieved from: http://publications.gc.ca/collections/collection_2010/statcan/21-006-X/21-006-x2008004-eng.pdf
- American Farmland Trust (AFT) (2010). *Factsheet: Cost of Community Services Studies*. Retrieved from: <http://www.farmland.org/documents/Cost-of-Community-Services-08-2010.pdf>.
- Arendt, R. (1994). *Rural by Design: Maintaining Small Town Character*. Chicago: American Planning Association.
- Arendt, R. (1997). Basing Cluster Techniques on Development Densities Appropriate to the Area. *American Planning Association Journal, Winter, 1997*. pp. 137-145.
- Arendt, R. (2004). Linked Landscapes: Creating Greenway Corridors through Conservation Subdivision Design Strategies in the Northeast and Central United States. *Landscape and Urban Planning, Vol. 68*. pp. 241-269.
- Basavarajappa K. G, Ram, B., Statistics Canada (1983). *Historical Statistics of Canada (11-516-X)*. Statistics Canada. Retrieved from: <http://www.statcan.gc.ca/pub/11-516-x/sectiona/4147436-eng.htm>.
- Buchan, R. (2004). The Costs and Impacts of Rural Sprawl: Not All Sprawl Is Equal. *Plan Canada. 44.3*, pp. 38-40.
- Bryant, C., Mitchell, C.J.A. (2006). The City's Countyside. In T. Bunting and P. Filion (Eds.), 3rd ed. *Canadian Cities in Transition: Local Through Global Perspectives* (pp. 234-248). Don Mills: Oxford University Press.
- Burchell, R.W. (1997). Economic and Fiscal Costs (and Benefits) of Sprawl. *The Urban Lawyer, Vol. 29, No. 2*, pp. 159-181.
- Burchell, R.W., Shad, N.A., Listokin, D., Phillips, H., Downs, A., Seskin, S.,...Gall, M. (1998). *The Costs of Sprawl – Revisited*. Washington: National Academy Press.
- Caldwell, W. 1985. Rural Planning and Agricultural Land Preservation: The Experience of Huron County. *The Great Lakes Geographer, Vol. 2, No. 2*. pp.21-34.
- Caldwell, W., Weir, C. (2002). *Ontario's Countryside: A Resource to Preserve or an Urban Area in Waiting?: Severance Activity in Rural Ontario's Agricultural Land During the 1990's*. University of Guelph.

- Caldwell, W., Dodds-Weir, C., Eckert, A. (2012). *Lot Creation in Ontario's Agricultural Landscapes: Trends, Impacts and Policy Implications. Report 1: Literature Review*. Retrieved from:
www.waynecaldwell.ca/Projects/ruralnonfarmrevisit/Impact%20of%20RNF%20Development%20on%20Agriculture%20-%20Final%20Lit%20Review.pdf.
- City of Ottawa (2003). *Official Plan*. Retrieved from:
<http://ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan>
- City of Ottawa (2008). *2008 Official Plan Review: Rural Settlement Strategy*. Retrieved from:
<http://ottawa.ca/calendar/ottawa/citycouncil/occ/2008/12-10/arac/Document%203%20-%20Rural%20Settlement%20Strategy.pdf>
- City of Quinte West (2013). *Official Plan*. Retrieved from:
<http://www.quintewest.ca/en/resourcesGeneral/QWOPFullCopy-FinalOMBAapproved07-17-2013.pdf>
- County of Prince Edward (1998). *Official Plan*. Retrieved from:
http://www.pecounty.on.ca/government/eng_dev_works/development_services/pdf/OfficialPlanJANUARY2011.officeupdate_000.pdf
- County of Prince Edward (2012). *Official Plan Review Issues Paper 6: The Future of Rural*. Retrieved from:
http://www.pecounty.on.ca/government/eng_dev_works/development_services/pdf/IP6TheFutureofRuralJune2012.pdf.
- County of Prince Edward (2012). *Official Plan Review Issues Paper 12: County Design*. Retrieved from:
http://www.pecounty.on.ca/government/eng_dev_works/development_services/pdf/IssuesPaper12CountyDesign_000.pdf.
- County of Renfrew, (2002). *Official Plan*. Retrieved from:
<http://www.countyofrenfrew.on.ca/departments/development-and-property/planning-and-land-division/county-official-plan/>
- Coupal, R.H., McLeod, D.M., Taylor, D.T. (2009). *The Fiscal Impact of Rural Residential Development: An Econometric Analysis of the Cost of Community Services*. Retrieved from: <http://www-pam.usc.edu/volume5/v5i1a3s1.html>.
- Davis, J.S., Nelson, A.C., Dueker, K.J. (2007). The New 'Burbs: The Exurbs and Their Implications for Planning Policy. *Journal of the American Planning Association*, Vol. 60. pp. 45-59.

- Federation of Canadian Municipalities (FMC) (nd). *Rural Canada by the Numbers*. Retrieved from:
https://www.fcm.ca/Documents/backgrounders/Rural_Canada_by_the_Number_EN.pdf.
- Federation of Canadian Municipalities (FMC) (2006). *Building Prosperity for the Ground Use: Restoring Municipal Fiscal Balance*. Retrieved from:
http://www.fcm.ca/Documents/reports/Building_Prosperty_from_the_Ground_Up_Restoring_Municipal_Fiscal_Balance_EN.pdf.
- Government of Ontario (1990). *Planning Act, R.S.O., 1990, Chapter P.13*.
- Government of Ontario (2014). *Provincial Policy Statement (PPS) 2014*.
- Government of Ontario (2005). *Provincial Policy Statement (PPS) 2005*.
- Government of Ontario (1996). *Provincial Policy Statement (PPS) 1996, amended in 1997*.
- Government of Ontario (2014). *An Introduction to the Provincial Policy Statement, 20014: Rural Ontario. Draft for Discussion*. February, 2014. Retrieved from:
<http://www.mah.gov.on.ca/AssetFactory.aspx?did=10476>
- Greenaway, G., Sanders, S. (2006). *The Fiscal Implications of Land Use: A “Cost of Community Services” Study for Red Deer County. Main Report*. Miistakis Institute, University of Calgary.
- Hemson Consulting Ltd. (2009). *Comparative Municipal Fiscal Impact Analysis*. Prepared for the City of Ottawa. Retrieved from:
<http://ottawa.ca/calendar/ottawa/citycouncil/ara/2009/02-02/Document%205.pdf>.
- Hodge, G. 1986. *Planning Canadian Communities: An Introduction to the Principles, Practice and Participants*. Toronto: Methuen.
- Holcombe, R. (1999). In Defence of Urban Sprawl. *PERC Reports. Vol. 17, No. 1*. Retrieved from: <http://perc.org/sites/default/files/feb99.pdf>
- Joseph, A. and Smit, B. (1981). Implications of Exurban Residential Development: A Review. *The Canadian Journal of Regional Science. Vol. IV, No. 2*. pp. 207-224.
- Joseph, A. and Smit, B. (1985). Rural Residential Development and Municipal Service Provision: A Canadian Case Study. *Journal of Rural Studies. Vol. 1, No. 4*. pp. 321-337.
- Kelsey, T.W. (1993). Fiscal Impact of Population Growth and Decline in Small Communities. *American Journal Agricultural Economics. Vol. 75*. pp. 1169-1172.

- Laurentian Valley (2002). *Official Plan*. Retrieved from:
<http://www.laurentianvalleytwsp.on.ca/download.php?dl=YToyOntzOjI6ImkljtzOjI6IjcyIjtzOjM6ImtleSI7aToxO30=>
- Lokocz, E., Ryan, R. Sadler, A.J. (2011). Motivations for Land Protection and Stewardship: Exploring Place Attachment and Rural Landscape Character in Massachusetts. *Landscape and Urban Planning*. Vol. 99. pp. 65-76.
- Milburn, L.S. (2011). The New Decision-Makers in the Rural Landscape – Who Are Non-Farm Rural Landowners? *Journal of Rural and Community Development*. Vol. 6, No. 1, pp. 1-21.
- Milburn, L.S., Brown, R., Mulley, S.J. (2010). ‘...Silver in the Stars and Gold in the Morning Sun’: Non-farm Rural Landowners Motivations for Rural Living and Attachment to their Land. *Landscape Research*. Vol. 35, No. 1. pp. 27-46.
- Ministry of Finance (2012). *2011 Census Highlights: Factsheet 1*. Retrieved from:
<http://www.fin.gov.on.ca/en/economy/demographics/census/cenhi11-1.html>.
- Ministry of Finance (2013). *Ontario Populations Projection Update*. Retrieved from:
<http://www.fin.gov.on.ca/en/economy/demographics/projections/>
- Ministry of Municipal Affairs and Housing (MMAH) (1988). *Financial Analysis of Residential Development: A Case Study for Brighton Township*. Prepared by the Community Planning Branch.
- Ministry of Municipal Affairs and Housing (MMAH) (2005). *2005 Planning Reform Municipal Session*.
- Ministry of Municipal Affairs and Housing (MMAH) (2009). *Eastern Ontario Municipality Links*. Retrieved from: <http://www.mah.gov.on.ca/Page1079.aspx>.
- Ministry of Municipal Affairs and Housing (MMAH) (2011). *Municipal Service Offices*. Retrieved from: <http://www.mah.gov.on.ca/Page747.aspx>.
- Ministry of Agriculture Food and Rural Affairs (OMAFRA) (2013). *Minimum Distance Separation (MDS) Formulae*. Retrieved from:
<http://www.omafra.gov.on.ca/english/landuse/mds.htm>.
- Ministry of Agriculture Food and Rural Affairs (OMAFRA) (2014). *Use of Soil and Canada Land Inventory (CLI) Information for Agricultural Land Use Planning in Ontario*. Retrieved from: http://www.omafra.gov.on.ca/english/landuse/gis/soil_data/nts.htm.
- Ministry of Finance (2013). *Ontario Populations Projection Update*. Retrieved from:
<http://www.fin.gov.on.ca/en/economy/demographics/projections/>.

- Municipality of Dysart et al (2003). *Official Plan*. Retrieved from:
<http://www.dysartet.ca/wp-content/uploads/2013/09/Dysart-OP-Consolidation-Dec-2010.pdf>
- Prince Edward County (2012). *Official Plan Review Issues Paper 6: The Future of Rural*. Retrieved from:
http://www.pecounty.on.ca/government/eng_dev_works/development_services/pdf/IP6TheFutureofRuralJune2012.pdf
- Pollock-Ellwand, N. (2001). Landscape Policy and Planning Practice: The Gap in Understanding, Ontario, Canada. *Landscape Research*. Vol. 26, No. 2, pp. 99-118.
- Ryan, R. L. (2006). Comparing the Attitudes of Local Residents, Planners and Developers about Preserving Rural Character in New England. *Landscape and Urban Planning*. Vol. 75. pp. 5-22.
- Statistics Canada (2011). *From Urban Areas to Population Centres*. Retrieved from:
<http://www.statcan.gc.ca/subjects-sujets/standard-norme/sgc-cgt/notice-avis/sgc-cgt-06-eng.htm>.
- Statistics Canada (2013). *Total Fertility Rate*. Retrieved from:
<http://www.statcan.gc.ca/pub/91-209-x/2013001/article/11784/c-g/desc/desc05-eng.htm>.
- Statistics Canada (2014). *Canada's Farm Population: Agriculture-Population Linkage Data for the 2006 Census*. Retrieved from: <http://www.statcan.gc.ca/ca-ra2006/agpop/article-eng.htm>.
- Statistics Canada (2014). *The Canadian Population in 2011: Age and Sex*. Retrieved from:
<http://www12.statcan.ca/census-recensement/2011/as-sa/98-311-x/98-311-x2011001-eng.cfm>.
- Statistics Canada (2014). *Population and dwelling counts, for Canada, provinces and territories, census divisions, and census subdivisions (municipalities), 2011 and 2006 censuses*. Retrieved from: <http://www12.statcan.ca/census-recensement/2011/dp-pd/hltfst/pd-pl/Table-Tableau.cfm?LANG=Eng&T=304&PR=35&S=51&O=A&RPP=10>
- Thompson, D. (2013). *Suburban Sprawl: Exposing Hidden Costs, Identifying Innovations*. Retrieved from:
http://thecostofsprawl.com/report/SP_SuburbanSprawl_Oct2013_opt.pdf.
- Tilt, J.H., Kearney, A.R., Bradley, G. (2007). Understanding Rural Character: Cognitive and Visual Perceptions. *Landscape and Urban Planning*. Vol. 81, pp. 14-26.
- Tomalty, R., Skaburskis, A. (2003). Development Charges and City Planning Objectives: the Ontario Disconnect. *Canadian Journal of Urban Research*. Vol. 12, No. 1.

- Township of Athens (2010). *Official Plan*. Retrieved from:
<http://athenstownship.ca/services/96-main-office/122-official-plan>
- Township of Beckwith (1989). *Official Plan*. Retrieved from:
<http://www.twp.beckwith.on.ca/planning.aro>
- Township of Drummond/North Elmsley (2011). *Official Plan*. Retrieved from:
<http://www.dnetownship.ca/sites/dne.civicwebcms.com/files/media/Official%20Plan%202012.pdf>
- Township of Central Frontenac (2008). *Official Plan*. Retrieved from:
http://www.centralfrontenac.com/documents/guides/2008_op_schedule_a2_2008.pdf
- Township of Edwardsburg/Cardinal (2010). *Official Plan*. Retrieved from:
<http://www.twpec.ca/wp-content/uploads/2014/03/Official-Plan.pdf>
- Township of Elizabethtown-Kitley (2006). *Official Plan*. Retrieved from:
<http://elizabethtownkitley.civicweb.net/contentengine/Link.aspx?ID=348>
- Township of Frontenac Islands (2011). *Official Plan*. Retrieved from:
<http://municipality.frontenacislands.on.ca/files/OP%20October%202011%20ADOPTED.pdf>
- Township of Lanark Highlands (2012). *Official Plan*. Retrieved from:
<http://www.lanarkhighlands.ca/Planning/plan/Official%20Plan%20Office%20Consolidation.pdf>
- Township of Laurentian Valley (2002). *Official Plan*. Retrieved from:
<http://www.laurentianvalleytwsp.on.ca/departments/planning/official-plan/>
- Township of Mississippi Mills (2005). *Community Official Plan*. Retrieved from:
<http://www.mississippimills.ca/en/resourcesGeneral/Community%20Official%20Plan%202006.pdf>
- Township of North Grenville (2009). *Official Plan*. Retrieved from:
<http://www.northgrenville.ca/files/NG%20OP%202010.pdf>

9. Appendix

Appendix 1. Policy Review Matrix

Municipality:		Date of Municipal OP Adoption/Approval:	
	Policy (Y/N)	Relevant Sections	Comments/Details of Policy
Minimum/Maximum Lot Size			
Eligibility Date			
Number of New Lots Permitted			
Limited Residential Policies			
Limited Residential Definition			
Strip Development Policies			
Strip Development Definition			
Scattered Development Policies			
Scattered Development Definition			
Rural Character Preservation Policies			
Infilling Policies			
Infilling Definition			
Alternative / Unique Land Pattern Policies			
Other			