Promotion of Physical Activity in Rural Official Plan Policies A Comparative Review of Four Rural Municipalities in Ontario

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ABSTRACT

Concern for rising rate of obesity and chronic diseases in Ontario (and their associated costs) has led many health professionals to tout the benefits of physical activity as both a preventative and interventionist medical approach. Further, while the rates of obesity and some chronic diseases appear to be particularly high in rural Ontario, many of the initiatives targeting the promotion of physical activity appear to be been geared to urban municipalities. Therefore, of particular interest to this project was how the natural and built environment of a rural municipality may be adapted to encourage physical activity at the community level.

Accordingly, the purpose of this research project was to evaluate the ways in which four rural municipalities have included policies that promote physical activity in their Official Plans. Findings from this research project include the fact that each municipality is different and each has, within its jurisdiction, a number of unique assets and challenges that has influenced the way in which physical activity is approached. The four rural municipalities were found to share some commonalities, including a limited access to resources (in terms of staff, knowledge and funding) and an abundance of natural resources. Further, three of the four municipalities considered the local Health Unit to be a key source of opportunity to enhance access to resources that would otherwise be unavailable. Towards this end, this paper has attempted to building a common understanding of the ways planning and health professionals could potentially intersect in the effort to promote community health initiatives thereby strengthening the combined effort of planning and health professionals in promoting physical activity in Rural Ontario.

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INTRODUCTION

In 2011, the Province of Ontario spent approximately 40 % of its total programme spending on health care costs (Drummond, D, 2011). In the absence of changes to Ontario's health care system, it has been projected that this percentage will increase to 70-80% of the Province's budget by 2030 (ibid). This substantial (and untenable) increase in health care costs has been attributed to several factors: an aging population, rising rates of chronic diseases such as heart disease, diabetes and obesity, our sedentary lifestyle and the predominance of a medical interventionist approach to health care (ibid).

To address these negative health trends and factors, health professions have come to promote the benefits of physical activity as a low cost preventative and interventionist health care model. This has translated into the promotion of physical activity (as a leisure and utilitarian activity) at a community and individual level and the built environment has come to be viewed as a particularly notable source of influence on physical activity. Accordingly, a large net has been cast over professionals who are now recognized as having a front line role to play in influencing health outcomes, including: land use planners, landscape architects, transportation engineers, downtown business development groups, community groups, recreational groups and enthusiasts, and traditional health professions such as doctors, nurses, specialists etc.

The subject research paper attempts to address two important research gaps in understanding the relationship between the built environment and physical activity: the first being that that although rural areas appear to be suffering from disproportionate rates of chronic diseases, little research has been done to investigate how in a specifically rural context, the built and natural environment may promote

or impede physical activity, and secondly, how land use planning policies may be used to promote physical activity in rural areas.

PURPOSE

Research has identified land use planning as being the 'link', or the means by which health may be influenced by the built environment. However, much of the research conducted from a health perspective typically glosses over the nature and extent of this 'link'; it remains the 'black box' between health and the built environment. Papers written from a health perspective have focused on land use planning policies or regulations related to health but have done so by generalizing land use planning policies or regulations (Brownson, R.C., et al, 2001, Heath et al 2006, Barnidge, E et al 2013, Schmid, T., Pratt, M., and L. Witmer 2006). Similar research conducted from a land use planning perspective is often completed under the guise of 'healthy community' or 'sustainable community' research and while health improvements are an assumed outcome, they are rarely the specifically desired outcome. It appears that the approach to this research topic to date, has missed the mark of providing a health – focused *and* a detailed land use planning oriented discussion of how land use planning policies can influence health.

Further, much of the health and built environment research has focused, until recently, on urban areas. The decision to focus this paper on a rural context is based on a perception that while land use planning for 'healthy' communities is very much at the forefront of Ontario's land use planning sphere, much of its 'on-the-ground' implementation has been dedicated to urban centres. For instance, 'healthy community initiatives' are often associated with supports for active and passive transportation corridors, mass public transit, mixed use developments, intensification, protection of agricultural lands, community gardens, separation distances between sensitive uses and high-volume traffic corridors,

protection of natural environment, and heat-island reduction initiatives, etc. While some of these strategies may be useful to rural communities, many may not.

The purpose of this paper is to address these research gaps. It intends to investigate the potential of land use planning policies to improve the health of adults living in rural municipalities by way of promoting physical activity opportunities. Specifically, it compares and contrasts the land use planning policy documents (Official Plans) of four upper-tier / single tier municipalities in Ontario (Bruce County, Grey County, Haldimand County and Norfolk County) to identify how and to what extent such policies promote (or impede) physical activity for adults. This policy analysis will provide insight into the success and challenges of such policies in rural Ontario. Several key informant interviews were conducted to flush out the case studies.

The paper is organized into five sections: 1) Literature Review 2) Planning Context 3) Research Method 4) Policy Review, 5) Discussion, and 6) Conclusion.

CHAPTER ONE: LITERATURE REVIEW

Rural Health Trends

In order to describe the nature of the relationship between a 'rural' population and their built

environment, one must consider what definition of 'rural' is being used. While debate exists as to

whether the term 'rural' is a socio-cultural or a geographical representation, this paper will make the

assumption that 'rural' is a place based concept and as such, it will include a review of the multitude of

ways 'rural' is defined in Canada.

At the federal or provincial level, Statistics Canada issued an article in 2001 summarizing the various

statistical definitions of 'rural' (duPlessis, V., Beshiri, R., Bollman, R.D., Clemenson, H., 2001). It

described the six (6) ways 'rural' may be defined, each significantly different. If one were to estimate

the number of people living in rural Canada, the number would be very different based on what

definition of 'rural' is being used. For instance, Canada's rural population estimates range from 22 -

38% depending on the definition of 'rural' (Gupta, S., and L. Scenzilet, (2007). In considering

statistics related to physical activity and health in rural populations, there is a need to be aware which

definition of 'rural' is being used.

At a federal level, several studies have been undertaken for the purpose of defining the particular health

status of rural Canadians. One such study, called 'Canada's Rural Communities: Understanding Rural

Health and its Determinants" undertook in-depth statistical analysis of various health risks and

mortality rates between and amongst Canada's rural and urban populations, utilizing the RST/MIZ¹

definition of 'rural' (DesMeules & Pong 2006)

¹ RST/MIZ method of defining 'rural' includes four rural sub-groups based on their proximity to urban population centers of

10,000 people or more (duPlessis, V., Beshiri, R., Bollman, R.D., Clemenson, H., 2001)

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Some of the interesting findings include:

- Rural areas were at a general health 'disadvantage' compared to urban areas for many health-related measures examined;
- Obesity rates were higher in rural Canada and dietary practices, leisure time and physical activity rates were lower in rural Canada;
- Canadians living in strong, weak and no MIZ areas reported a higher prevalence of arthritis rheumatism than those in urban areas, and;
- Higher mortality risks in rural areas (adjusted for various socio-economic and demographic factors) existed for all-cause mortality, motor vehicles accident deaths, and suicides. Motor vehicle accident deaths for men and women (particularly women) held, by far, the highest mortality risk (ibid).

Another federal report tasked with identifying the unique health challenges facing rural Canadians was completed by the Ministerial Advisory Council on Rural Health (2002). This report, called "Rural Health in Rural Hands: Strategic Directions for Rural, Remote and Northern and Aboriginal Communities" was prepared to provide advice to the Federal Minister of Health on how the government could improve the health of rural individuals and communities (ibid). This report defined Rural Canada as "all territory outside a major urban centre and constitutes more than 95% of the country's land mass". It did not further articulate the definition of rural using one of Statistic Canada's definition, other than to clarify that 'rural' includes 'rural, remote and northern' communities.

The 'Rural Health, Rural Hands' report identified a number of broad trends and characteristics suggested to impact on the health of individuals living in rural communities. Those trends related to physical activity include:

- People living in rural areas have to travel further and more often for work, shopping, etc;
- High dependency populations high proportion of senior and youth populations and low proportion of working aged populations;
- Varied linguistic and cultural communities, with some having very high minority communities,
 while most have low proportion of recent immigrants or visible minorities;
- Half of all Aboriginal people live in rural, remote and northern communities such communities tend to be younger, and;
- Health determinants such as high rates of obesity and low rates of physical activity were prevalent amongst people in rural areas compared to urban areas. (ibid)

At a local level, health concerns related to rural areas have become such a priority in certain parts of rural Ontario that a research institute was created by the South West Local Health Integration Network (LHIN) to investigate and improve health and quality of life of its rural residents through research, education and communication. Called the Gateway Rural and Research Institute (GRRI), this institute was created in response to significantly higher rates of several chronic health conditions within its jurisdiction, being Grev and Bruce Counties, and Huron Perth Counties and http://www.gatewayresearch.ca/.

Notwithstanding the above, even 'rural' Health Units include at least small and medium sized population centres. Exclusively 'rural' health statistics that differentiate between those living within and outside these population centres appear to be lacking. An example of a study undertaken to specifically identify the health status of those living in rural areas was one completed by the Region of Waterloo Public Health in 2004. This study, called the "Rural Health Study found the health of rural residents to be at increased risk due to stress (from economic challenges, longer commutes and

perceived cultural decline) and limited access to facilities (ROWPH, 2004). The study method reflected an inability to otherwise differentiate between 'rural' and 'urban' health conditions using available statistical sources. Instead, the study relied upon the use of open ended questions during key informant interviews, focus groups, township meetings and personal interviews.

Within the literature, there are a number of studies that have identified differences in health associated with whether people live in rural or urban areas. Obesity has been found to be greater in adults and children living in rural areas than urban areas by a number of researchers (Liu, J. et all., 2008; Berford, C., et all., 2012; and Eberhardt and Pamuk, 2004). Unintentional injuries (particularly those as a result of automobile accidents), suicide, and a number of chronic health conditions, such as tooth decay, arthritis, diabetes, high blood pressure, chronic heart disease have also been found to be higher amongst the adult population in rural areas in relation to urban areas (Eberhardt and Pamuk, 2004). Further, access to medical facilities for emergency purposes and maintenance of chronic health conditions have been documented to severely impact the health of rural residents (Eberhardt and Pamuk, 2004).

To summarize, a number of studies have identified some of the key health concerns facing rural populations, being:

- Obesity
- Chronic heart disease
- High blood pressure
- Arthritis
- Diabetes
- Unintentional injuries (including those from motor vehicle and workplace accidents)
- Toothdecay

Suicide

A caveat to these health statistics is that certain health conditions may also be related to population and employment trends. For example, agricultural and forestry related work have high injury rates compared to 'white-collared or 'blue-collared' work, therefore it is not surprising that there are higher rates of work-related injuries in rural areas. Further, white, middle-class and aging populations with high rates of outmigration may have very different dietary preferences and lifestyles than populations with high rates of new immigrants and low levels of outmigration.

With respect to the four municipalities subject to the comparative policy review, the table below (Table 1) shows that according to the Gateway Rural and Research Institute and Statistics Canada (2011), several chronic health conditions are particularly high in the Grey Bruce and Haldimand Norfolk Health Units area, relative to the Province of Ontario.

Table 1: County Health Statistics

	Grey Bruce	Haldimand Norfolk	Ontario
High Blood Pressure	20.2 %	22.1 %	17.6 %
Diabetes	7.1 %	7.5 %	6.6 %
Obesity	21.6 %	23.9 %	18.3 %
Arthritis	22.7 %	25 %	17.2 %

Benefits of Physical Activity

The link between physical activity and health has been acknowledged at a national level in both the United States and Canada. In 1996, the U.S. Surgeon General released a statement acknowledging that there was enough evidence to conclude a relationship between physical activity and health outcomes existed (Williams & Wright, 2007). Benefits of physical activity include: lowering mortality rates for old and young adults; lowering the risk for heart disease and stroke; decreased risk of colon cancer;

decreased risk of Type 2 diabetes; lower weight and reduced body fact; and, improvements in mood and relief from symptoms of depression and anxiety (Williams & Wright, 2007, Rydin, Y., 2012, Perrotta, K., 2011, Heart and Stroke Foundation, 2013). In 2003, the Public Health Agency of Canada concluded physical activity could have the potential to reduce the risk of colon cancer, protect women against breast cancer, reduce the risk of developing Type 2 diabetes, can reduce the risk of osteoporosis if undertaken in childhood and adolescence, maintain bone mass in adults, and, if done on a regular basis can improve function and relieves symptoms of osteoarthritis and rheumatoid arthritis (2012). Lesser known benefits have been suggested to include increased community vibrancy, social cohesion and improvements to individual mental health (Perrotta, K., 2011, Frankish, et. al, 1996). National and International policy statements endorsing the promotion of physical activity as a means to improve health outcomes have been issued by many countries and international health-related agencies, such as the World Health Organization and the United Kingdom (Sallis, J., et al, 2009).

More recently, research has estimated the cost associated with the negative health impacts of insufficient physical activity and obesity. A study concluded that in 2009 physical inactivity and obesity cost the Province of Ontario \$3.4 billion and \$4.5 billion respectively, in terms of direct and indirect costs (Katzmarzyk, P. 2011). Direct costs include, but are not limited to: hospital care, drug and physician care expenditures, while indirect costs include illness, injury-related work disability or premature death (ibid). It was noted that in 2001 such costs were estimated (using the same methods) to be \$1.8 Billion for physical inactivity and \$1.6 Billion for obesity (ibid). The substantial rise in costs was attributed to the general increase in levels of physical inactivity and obesity amongst the population and the increasing cost of medical care.

Levels of Physical Activity in Rural Areas

A recently released report by Statistics Canada found that only 15 % of Canadian adults accumulated the recommended amounts (150 minutes) of moderate to vigorous physical activity per week (Colley, R., et.al, 2011). Men were found to engage in more physical activity than women (ibid). This amount of physical activity is associated with health benefits.

A number of scholarly papers have investigated the physical activity levels between people living in rural and urban areas. One such study, based on a US national study assessing 'non-occupational leisure-time physical activity' concluded the highest level of physical inactivity was in rural areas and in the southern United States, and the lowest level of physical inactivity was in metropolitan and large urban areas and in the western United States (Reis, J.P., et al, 2004). Other research suggests rural adults perceive fewer supports in their neighbourhood that would support physical activity, and have higher inactivity levels than those in more urban areas (Parks, et al., 2003) and that urban women participate in leisure time physical activity more than rural women (Cleland, V.J., et al., 2012).

It is noted that other evidence suggests that some population groups living in rural areas, particularly children, are actually *more* physically active than their urban counterparts, but also *more likely* to be obese (Liu, J. et al., 2008). This research is noted as a caveat, as it appears that the children interact very differently with the built and natural environment than adults do and built environment interventions may impact children differently than adults. Further, it acknowledges that there are a number of factors that may be contributing to obesity prevalence (or any other health concern for that matter), including the intake of healthy food and food culture. That is to say that increasing physical activity levels is not a panacea to health concerns, but it is an improvement to one of many contributing factors to health.

Built Environment Factors Affecting Physical Activity: A Rural Lens

Notwithstanding the above, it is widely acknowledged that a lack of physical activity does (or will) negatively affect our health and ultimately increases the cost of health care. The following briefly describes four (4) common research themes that suggest the built environment impacts physical activity: 1) Population and Employment Density; 2) Diversity of Land Uses; 3) Landscape Design and Street Connectivity, and; 4) Access to Facilities. This section also includes a specific note on how each of these themes may be translated using a 'rural lens' perspective.

1. Population and Employment Density

As population and employment density increase, transit systems become more financially feasible. Most transit trips begin and end in walking trips (Besser and Dannenberg, 2005) and the use of transit often correlates with more utilitarian (as opposed to leisure) walking trips and fewer vehicles trips (Ross and Dunning 1995). A report by the Canadian Institute for Health Information Research found a statistically significant difference between adults who engaged in active transportation compared to those who did not, relative to whether they were more likely to be in a normal weight category (CIHI, 2006). Those who did not engage in active transportation were less likely to be in a normal weight category (ibid).

Increased population and employment densities also reflects a more efficient and cost effective development pattern that makes available money that would otherwise be spent on higher infrastructure costs associated with less efficient (i.e. sprawling) development patterns.

In addition, sprawling low density neighbourhoods may necessitate a dependency on vehicles for work, errands and access to recreational activities. Research has suggested that increasing the amount of time spent in a vehicle commuting may be associated to three negative outcomes: increased prevalence of obesity, increased risk of incurring a vehicle related injury and decreased mental health (Frumkin, Frank & Jackson, 2004, Handy, et al, 2002, Hannon, et.al., 2012)

Research has documented commuting time (including side stops along the way) in 2005 in Canada was on average 63 minutes per day and this has increased to 65 minutes on average in 2010 (Tucotte, M. 2011). Statistics show that for every hour of time we spend in a car commuting, our risk of obesity increases 6 % (Frank, L, 2004). The amount of time spent in a car is time not spent walking: in the United States, it has been estimated that 86 % of all person trips and 91% of all person miles occurred in a private vehicle whereas walking accounted for only 5 % of trips and less than 1% of miles (Frank and Engelke, 2006). A study completed in Toronto, Canada compared residents of a York region suburb to residents of the City of Toronto and found residents living in York region owned more vehicles on average, walked and cycled less, and drove more compared to Toronto residents (Briggs, 2001).

Further, vehicle related injuries have been described as the least appreciated risk behaviour undertaken by people (Frumkin, Frank and Jackson, 2004). The World Health Organization and the World Bank estimates that by the year 2020, road traffic injuries will become the third greatest contributor to the 'global burden of disease and injury' (Office of the Chief Coroner, 2012b). Vehicle related deaths and injuries include drivers, passengers, pedestrians and bicyclists. Recently the Office of the Chief Coroner of Ontario issued two reports on the issue, a 'Cycling Death Review' and a 'Pedestrian Death

Review'. Both reports highlighted the importance of walking and cycling in maintaining a healthy lifestyle and noted that the built environment may not always safely accommodate such pursuits.

As an example of governmental policy linking health and the built environment, the 'Pedestrian Death Review' recommended modifications to the built environment as the primary method to achieve reduced pedestrian deaths. It recommended a 'Complete Streets' approach to the development and redevelopment of communities so that streets are designed to accommodate all types of users regardless of transportation mode, age or physical ability (Office of the Chief Coroner, 2012a).

Research also suggests that rural areas suffer from higher injury rates both from vehicle related and work related accidents due to the often long commute times and high speeds of travel and the type of occupations that are more often found in rural areas (Frumkin, Frank & Jackson, 2004, Ministerial Advisory Council on Rural Health, 2002).

Negative mental health has been shown to be associated with lack of physical activity and time spent commuting. A Canadian Mental Health and Well-Being Survey found, in 2002, Canadians who selfreported being physically inactive were more likely to perceive their level of mental health to be fair or poor, compared to those who were active (Government of Canada, 2006). Further, for those commuting long distances to work, a number of mental health issues have been attributed to such commutes, including: increased prevalence of road rage, back pain, cardiovascular disease, selfreported stress, arthritis, asthma and headaches (Frumkin, Frank and Jackson, 2004). Visual clutter, traffic congestion, traffic unpredictability, parking challenges and vehicle exhaust are all factors associated with commuting that impact negatively on health (ibid). Such stress is often difficult to

² Refers to ensuring the entire right-of-way is designed and operated to enable safe access to all users (American Planning Association, 2010)

leave outside the home and may impact family relationships (ibid). In addition to all of these negative issues associated with commuting, time spent commuting is time not spent with family or friends or undertaking leisure, social or recreational activities that are documented to alleviate stress (ibid). A Rural Lens on Population and Employment Density:

- Traditional municipal-owned and operated transit systems are often not possible in rural areas as low population densities make them financially unviable. Lack of transportation options in rural municipalities can severely impact already vulnerable populations in terms of their ability to access employment, health and education services and facilities, and healthy food. Alternative transportation options, such as enhanced private transit networks, are being tested by several rural municipalities, such as Grey County and Simcoe County (Scherzer, R, 2013).
- Commuting dependency may be reduced by supporting the intensification of development in existing population centres. Intensification makes development more cost effective and increases the potential for active transportation.
- Permitting growth of suburban nodes in close proximity to urban centres (but outside their jurisdiction) may increase pressure for transit options. Lacking transit service agreements between the rural and urban municipalities, transit opportunities may be severely limited. As suburban residents age or as they encounter financial challenges, their ability to drive may be reduced and without alternative modes of transportation, they may feel unwelcome and underserved by their community and move to others more accommodating.

2. Diversity of Land Uses

Some research suggests that people who live in neighbourhoods that include a mix of land uses, such as homes, stores, schools, offices, parks and other recreational facilities are more likely to take more utilitarian rather than leisure walking trips (Frumkin, Frank and Jackson, 2004). Studies have further

suggested that activity differences between communities that have a diversity of land mixes verses those communities that score high on a sprawl index³ may be attributed to the number of utilitarian walking trips, rather than leisure or recreational walking trips undertaken (Ewing et al, 2003, Frumkin, Frank and Jackson, 2004 and Saelens, Sallis & Frank, 2003). Such communities have within easy and safe walking distance numerous destination points and walking trips for small errands become more likely in these communities than sprawling homogenous communities.

That being said, many of these studies have focused on adult activity levels and research has suggested that factors influencing youth activity levels may be substantially different (Mercredy, 2010, Ding, D., et. al 2011). Furthermore, it has been suggested that the impact of 'self-selection' may be important to these studies in that people who want to be physically active choose to live in communities conducive to activity (Eid, J et., al, 2007). However, a recent study has shown that variables such as age, race and belief that the community supports active transportation is more important than desire to be physically active per se in determining where one lives (Librett, J. et al, 2006). Interestingly, this same research study noted that among the survey participants, those living in a rural area were significantly less likely to *want* to live in an active community (ibid).

Another aspect of community diversity relates to the problems associated with homogenous neighbourhoods. Homogeneous neighbourhoods are typified by a single housing form and density. For instance, neighbourhoods that include only large family homes built in the suburbs could be described as a homogeneous neighbourhood. These communities are particularly desirable to young couples at the beginning of the child-rearing life stage as the large homes, perceived safe street layout (cul-de-

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³Research completed by Ewing et al (2003) reviewed the physical activity levels and patterns of 440,000 people who lived in 448 US counties and 83 metropolitan areas between 1998-2000. Each county or metropolitan area was assigned a score on a 'sprawl index'. The score was based on density, land use mix, degree of 'centreing' and street accessibility.

sacs) and numerous small parks makes it conducive to raising small children. However, during subsequent life stages, such as when children become more independent and interested in entertainment forms other than what is provided by community parks, the family realizes there are no other entertainment options within safe walking distance. Finally, when the children leave home and the family wants to downsize, there is a lack of suitably sized homes. The family must move out of their community and away from their friends and neighbours, to downsize.

The homogenous neighbourhood is problematic for several reasons: it creates singular social ties between its inhabitants, reduces the opportunity to learn about different cultures, abilities, and even history. Further, the typical street pattern (loops and lollipops) and lack of diverse land uses of such neighbourhoods strongly discourages walking for utilitarian purposes (Frank and Engelke, 2006, Craig, C., et al, 2002 and Bray, Vakil and Elliott, 2005). Finally, homogenous neighbourhoods may also be more susceptible to economic challenges. An example of this susceptibility was demonstrated recently within a rural municipality near London Ontario wherein a neighbourhood association complained about the likelihood a proposed subdivision would decrease area home values as the subdivision only included homes with an average value of \$400,000 (DeBono, 2012). The municipality did not agree with the neighbourhood concerns, recognizing the danger in permitting homes only in the high-value range by noting that in the event of a wide-spread economic downturn, such neighbourhoods as a whole could become unaffordable and could be subject to mass foreclosures.

A Rural Lens on Diversity:

• Opportunities for mixed land use in rural area may be a challenge given the existing lot fabric, land uses and the lack of adequate services available to support more diverse land uses.

- Rural areas should try to avoid creating homogeneous communities (i.e. exclusively single detached homes) and encourage the redevelopment and intensification of existing.
- A noted trend within several rural municipalities is the 'immigration' of retired or semi-retired persons from large urban centres. These new residents seem to bring with them expectations on what services and amenities should be available within a safe walking distance and are providing additional support for local healthy community initiatives (McIntyre, J., 2013 and Laforest, C., 2013).
- Small communities should encourage limited commercial and retail businesses within the
 Village Cores and Hamlets so to service the local residents and reduce the reliance on vehicles
 for all errands.
- Combined multi-use facilities (such as a single facility that includes a library/arena/walking track) may be an important way to achieve cost savings while providing needed recreational services.
- Permitting multi-use rail and utility corridors for trail purposes in rural areas may provide an important link between rural and urban areas and promote physical activity.
- Diversity of land uses could extent to the support for agriculturally related, on-farm diversified,
 and agri-tourism related businesses.

3. Landscape Design and Street Connectivity

The design of our neighbourhoods may also impact physical activity. Research has investigated the likelihood that the following design factors improve physical activity levels: walkable and interesting destination points, perceived neighbourhood safety; pleasing aesthetic neighbourhood features; and; accessibility features. (Frost et al, 2010, Brownson, R. et all, 2000, Brownson R. et al, 2009, Sallis, J. F, 2009, Bergeron and Reyburn, 2013, Perrotta, K., 2011).

The connectivity of roads, paths and trails to interesting or necessary destination points for employment, shopping, recreational or amenity purposes has been associated with an increase in the uptake of both recreational and utilitarian walking and cycling trips (Sallis, J. F, et al, 2009). Connectivity (walkability) is higher in a grid or modified grid street pattern than a loops and lollipop street design (Handy et al, 2002).

Another factor is safety. The decision to walk or cycle may be related to the perception of safety. The presence or absence of the following design features can impact the perceived safety of a neighbourhood: street lighting, location and design of sidewalks, appropriate buffers to high-volume and/or high-speed roads, and whether there are 'eyes on the street' (Foster &Giles-Corti, 2008, Perrotta, K., 2011). The term 'eyes on the street' or 'eyes on the park' refer to the orientation of homes and businesses in relation to the street or park. Homes that include large front porches are more likely to have residents utilizing the front portion of their home and by default, maintaining a presence on a street/park, unlike 'snout' homes that feature large front garages.

The third factor is related to aesthetics, the architectural design features of buildings and structures in communities. This notion is based on research that demonstrates a person is more likely to walk in an area if it is pleasing to look at (Brownson, R. et al, 2000, Brownson R. et al, 2009, Sallis, J. F, 2009). Aesthetics may relate to both natural and built environmental design features, such as street trees, attractive and interesting commercial facades, street furniture, landscaping, greenery and open space, and pleasing residential architectural details and variety. Municipally driven community improvement projects often target downtown or main street façade and street improvements. Community design guidelines may be used to provide guidance on desirable design enhancements. Some rural

municipalities are starting to expand the focus of design improvements to rural tourist, on-farm diversified or agriculturally related businesses so to promote rural businesses in and of themselves and as potentially desirable destination points along walking or cycling trails (Manley, C. 2013)

The fourth factor is how user-friendly communities are to people of all ages. The idea of 'complete streets' originated in the Unites States and refers to a policy that ensures the entire 'right-of-way' is designed and operated to enable safe access to all users, including pedestrians, bicyclists, motorists and transit riders (American Planning Association, 2010). Elements that make up a 'complete street' include sidewalks, bicycle lanes (or wide paved shoulders), shared used paths, designated bus lanes and accessible bus lanes, median islands, curb extensions, street furniture and trees (Skoworodko, 2012). The idea of complete streets assists in the creation of communities built for '8 to 80', an entire lifespan. It enables residents of all ages and abilities to navigate safely through their community. Accessibility or usability of our communities appears to be an emerging planning issue in North America.

A Rural Lens: A Landscape Design and Street Connectivity

- Population Centres in rural municipalities could benefit from the application of improved street design features, especially respecting cross road towns and villages to improve perceived safety and aesthetics.
- Community Improvement Programs (CIP) may be especially useful to improving the architectural design of historical downtowns, rejuvenating their look and making them a more attractive destination to local residents.
- Such CIP's could be extended to rural-based businesses on the premise that enhancing local business will reduce vehicle trips for both employment and commercial / recreational purposes.

• Finally, some rural communities may face the interesting challenge of balancing the need to create safe communities with the desire for residents to maintain their 'rural' character as seen by residential opposition to street lighting and 'excessive' road maintenance, i.e. use of a tandem axel snow plow vs a plow truck (McIntosh, J., 2013). Such communities need to find a balanced approach to maintaining both safety and rural character.

4. Access to Facilities

Lee and Moudon (2004) reviewed a large body of research and concluded that both the presence of and proximity to public and private leisure facilities, including trails, parks, gyms and recreational facilities, will influence a person's physical activity. This is not to say that access to such facilities alone is responsible for a person's activity level, rather it makes the choice to be active easier.

With respect to rural communities, trails have been documented to play an especially important role in promoting physical activity among certain rural populations (women and persons in lower socioeconomic groups (Brownson, et al., 2000, Troped, P., et al, 2011, Schasberger, M., 2009). Trails have numerous benefits few other recreational facilities have. The task of establishing walking trails is relatively low-cost, often makes use of existing natural or infrastructure corridors and provides recreational opportunities to people of all ages and abilities, individuals or groups. You do not need to gather a team, you do not need special equipment, you can access them throughout the day and you do not need to be proficient at anything other than walking. The walking surface can range from natural to asphalt, making trails accessible to families with strollers, persons in wheelchairs, and teens on roller blades. Further, trails provide a means to link rural and urban areas, unlike fixed location recreation facilities, such as community centres, sport fields, etc. Being a link, trails also provide an opportunity

for retail, tourism and related-recreational businesses to locate on or near the trail for compounded marketing advantage.

This may be demonstrated in the genesis and growth of the 'Trail Town' movement in the United States - www.trailtowns.org. Towns such as Confluence, Pennsylvania have branded themselves as a 'trail town' and have marketed their commercial space for all types of trail-related businesses. Not only do its local residents benefit from using the local trail, their towns are undergoing a period of rejuvenation associated with the trail tourism. As a local example, the County of Bruce has twined community improvement with the 'trail town' idea and one of its local municipalities is now marketing itself based on its proximity to the 'Bruce Trail' (Laforest, C., 2013).

In addition to trails, rural areas have recreational assets that urban areas do not, such as County owned forests, privately owned natural and agricultural areas, gravel roads, abandoned rail corridors, utility corridors, and rehabilitated aggregate pits. These rural environments may offer ample opportunities for both passive and active recreational pursuits, ranging from rock climbing and zip lining to bird watching and geo-caching.

A Rural Lens: Access to Facilities

• Sparsely population rural municipalities may find it difficult to financially afford more than one or two large fixed location recreational facilities such as community centres, pools, ice rinks, sport fields. The desire to equally distribute these facilities throughout a community should be balanced with opportunities to make such facilities multi-purpose, providing a range of community services, such as meeting rooms, day care facility, indoor walking trail, ice rink, library etc.

 Supporting passive recreational pursuits through trail development requires cheaper infrastructure, is more user-friendly and takes advantage of unique natural rural assets, such as County forests and abandoned rail corridors.

CHAPTER TWO: PLANNING CONTEXT AND OPPORTUNITIES FOR THE PROMOTION OF PHYSICAL ACTIVTY

The purpose of this section is to outline the various land use planning processes in Ontario and how supportive physical activity policies may be introduced during the various planning processes.

Provincial Policy Statement

Land use planning in Ontario is governed at both the Provincial and local municipal level. At the Provincial level, the main policy document is the <u>Provincial Policy Statement, 2014</u> (PPS, 2014). The PPS, 2014 provides policy direction on matters of provincial interest related to land use planning and development. Its goal is to enhance the quality of life for all Ontarian's by way of protecting resources of provincial interest, public health and safety and the quality of the natural and built environment. The newly released PPS, 2014 updates the previous PPS. By virtue of Section 2.1(5) of the Planning Act, all municipal land use planning decisions 'shall be consistent' with the policies of the PPS, 2014. That being said, it is the intent of the Province that the PPS be read it its entirety and that all relevant policies are to be applied to each situation. This is crucial to the implementation of the PPS, 2014.

One of the goals of the PPS is the promotion of 'Healthy Active Communities'. Specifically, Section 1.1.1 of the PPS, 2014 promotes healthy, livable and safe communities, sustained by:

- a) Promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long-term;
- b) Accommodating an appropriate range and mix of residential housing (including second units, affordable housing and housing for older persons), employment (including industrial and

- commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open spaces, and other uses to meet long-term needs;
- Avoiding development and land use patterns which may cause environment or public health and safety concerns;
- d) Avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas which are adjacent or close to settlement areas;
- e) Promoting cost-effective development patterns and standards to minimize land consumption and servicing costs;
- f) Improving accessibility for persons with disabilities and older persons by identifying, preventing and removing land use barrier which restrict their full participation in society;
- g) Ensuring that necessary infrastructure, electricity generation facilities and transmission and distribution systems, and public service facilities are or will be available to meet current and projected needs; and
- h) Promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate.

Further, Section 1.1.3.2 of the PPS, 2014, states that land use patterns within 'Settlement Areas' shall be based on densities and a mix of land uses that support active transportation, are transit supportive, and minimize negative impacts to air quality and climate change and promote energy efficiency. The PPS, 2014 also includes, for the first time, policies on 'Rural Areas'. The PPS defines 'Rural Areas' as a system of lands within municipalities that may include rural settlement areas, rural lands, prime agricultural areas, natural heritage features and areas and resources areas.

Section 1.1.4.1 of the PPS, 2014 states that healthy, integrated and viable 'Rural Areas' should be supported by:

- a) Building upon rural character and leveraging rural amenities and assets;
- b) Promoting regeneration, including the redevelopment of brownfield sites;
- c) Accommodating an appropriate range and mix of housing in rural settlement areas;
- d) Encouraging the conservation and redevelopment of existing rural housing stock on rural lands;
- e) Using rural infrastructure and public service facilities efficiently;
- f) Promoting diversification of the economic base and employment opportunities through good and services, including value-added products and sustainable management or use of resources;
- g) Providing opportunities for sustainable and diversified tourism, including leveraging historical, cultural and natural assets;
- h) Conserving biodiversity and considering the ecological benefits provided by nature; and,
- i) Providing opportunities for economic activities in prime agricultural areas.

Section 1.5 of the PPS 2014 includes policies on Public Spaces, Parks and Trails and Open Spaces. It states that healthy active communities should be promoted by:

- a) Planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitates active transportation and community connectivity;
- b) Planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open spaces, trails and linkages, and where practical, water based resources;
- c) Providing opportunities for public access to shorelines; and
- d) Recognizing provincial parks, conservation reserves, and other protected area, and minimizing negative impacts on these areas.

Finally, Section 1.6.7.3 of the PPS, 2014 encourages multimodal transportation systems, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections which cross jurisdictional boundaries. Section 1.6.7.4 promotes land use patterns, density and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.

While these policies cited above provide a number of key examples of how the PPS, 2014 promotes land use patterns and development that encourages physical activity, it is not intended to be a complete list of all relevant policies. Additional policies not cited above could be relevant to specific situations.

Opportunity for Health Intervention:

Every five years the PPS is reviewed and may be updated by the Province. There are multiple
opportunities for public and agency review during this review. Formal submissions concerning
health and physical activity could feed into the review process to suggest enhanced policy
language.

The Planning Act, 1990⁴

The <u>Planning Act</u>, 1990, as amended, is the primary legislative act that governs the process of land use planning in Ontario. The <u>Planning Act</u> outlines matters of Provincial interest. In relation to physical activity, several land use planning matters have been identified as being a provincial interest:

- Section 2 (h) the orderly development of safe and healthy communities;
- Section 2 (i) the adequate provision and distribution of educational, health, social, cultural and recreational facilities, and;

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⁴ MMAH, 2013

• Section 2 (q) - the promotion of development that is designed to be sustainable to support public transit and to be oriented to pedestrians.

Section 2.1(5) of the Act requires that all municipal land use planning decisions 'shall be consistent' with the policies of the PPS, 2014 and shall conform, or not conflict with any Provincial Plans in effect. The <u>Planning Act</u> and its associated regulations further identifies the planning process associated with each planning application, including the provision of public notice, requirements for a complete application, agencies required for circulation, the number and timing of public meetings, appeal procedures, etc. It is important to note that the policies of the PPS, 2014 and the requirements of the Planning Act are intended to be minimum requirements that may be exceeded by a local municipality.

Provincial Plans include policy documents for particular places, identified by the Province as having special and unique contributions to the Province of Ontario and therefore in need of further protection and or guidance on future development forms and patterns. To date, the Province has issued several Provincial Plans, including, but not limited to, the Niagara Escarpment Plan, the Places to Grow Plan, the Greenbelt Plan, and the Oak Ridges Moraine Plan. As noted above, local planning documents are required to be consistent with or not conflict with the PPS, 2014 and Provincial Plans.

Opportunity for Health Intervention:

• Health Units are not identified in the Planning Act as a required 'agency' that must be circulated as part of the Official Plan, Zoning, and Plan of Subdivision or Condominium / Consent application process. Including the local Health Unit as a 'required agency' would ensure health considerations have been included during the application planning review.

Official Plans⁵

The <u>Planning Act</u> gives authority to both upper and lower tier municipalities to create their own Official Plan. An Official Plan (OP) is a high-level policy document that outlines municipal priorities, including land use and development patterns. The strength of language in an Official Plan is crucial in setting the tone for how land in the municipality should be used and developed both now and in the future.

The priorities of an OP are typically based on the findings and recommendations of a number of municipal foundational studies, including the review of existing infrastructure (transportation needs, water and sewer services, schools, parks, etc) population and employment growth projections, existing housing and commercial / industrial lands inventory, natural environment, cultural and archaeological assets and assessments. Official Plans are based on a planning horizon of 20-30 years and tries to meet the community needs within that time frame.

An OP usually speaks to the timing and co-ordination of developments, to ensure efficient and timely development patterns. It will also identify when larger planning processes, such as 'secondary planning' will be required – see below for more details.

An OP is created, updated and amended from time to time, based on input from both local community members and Provincial and local agencies, as required. Both the local municipality and an individual (or corporation) can make an application to change the municipal OP. For each type of planning application, an OP typically includes a list of the required information needed as part of an application submission. An OP also establishes the basic foundations upon which municipal zoning by-laws, community improvements, site development, and subdivision of land are to be evaluated against.

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⁵ MMAH, 2013

Finally, an OP includes policies and procedures to ensure public involvement in community development.

An OP (or amendment) may be endorsed by a local municipality (or lower-tier municipality) and approved by the Province (or upper-tier municipality) or approved by the single-tier municipality and / or approved by the Province. The <u>Planning Act</u> includes a list of municipalities that have approval authority for their own OP amendments. However, all new OP's and a few select types of OP amendments, such as removal of land from an 'employment area', requires the approval of the Province. The <u>Planning Act</u> requires an OP be updated every 5 years to ensure conformity to the PPS and these updates are also approved by the Province.

Opportunity for Health Intervention:

- Strong language in an Official Plan and consistent implementation will set the tone for local development expectations.
- Opportunities exist for public input and comment in the creation of all foundational studies.
 These foundational studies may not be under the Planning Department's jurisdiction, but will feed into local OP.
- A 'Community Health Assessment' could be identified in an OP as a required Foundational Plan.
- Until such time as the Planning Act requires, Health Units may be identified in an OP as a
 required commenting agency for all development applications to ensure health considerations
 are included in planning review.
- An Official Plan is the key document to set policies, development and application standards that
 may directly or indirectly promote physical activity.

Secondary Plans⁶

Similar to an Official Plan, a Secondary Plan provides for high level policy direction on land use and development patterns but its focus is on just one particular area of a municipality, rather than on the municipality as a whole. Like an Official Plan, its policies are based on a comprehensive review of the area's assets and deficiencies, population and employment growth projections, existing housing and commercial / industrial lands inventories and how this area is linked to the wider community. The secondary planning process results in a comprehensive development plan and all subsequent developments within that area are to take place according to the Secondary Plan.

Opportunity for Health Intervention:

- Strong language in the Secondary Plan and consistent implementation will set the tone for all local development expectations.
- Opportunities exist for public input and comment in the creation of a Secondary Plan and the foundational studies upon which it is based. A 'Community Health Assessment' could be identified in an OP as one of the required foundational study for the creation of a Secondary Plan.
- The Secondary Planning process is very important in guiding how all the parts of a community are intended to work together and it can be applied for both new and existing developments to guide growth and redevelopment. For small municipalities with few greenfield development opportunities due to limited population growth, the application of Secondary Plans over existing built up areas that have redevelopment potential may be the best method to encourage pedestrian friendly development forms.

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⁶ MMAH, 2013

Subdivision of Land⁷

Land in Ontario may be divided by plan of subdivision or by consent. The process for undertaking these types of applications are outlined in an OP, including when a plan of subdivision / condominium is required as opposed to a consent, and the information required to be submitted with an application before an application is considered complete.

Typically when an application involves more than 5 lots, or involves particularly sensitive land uses, a plan of subdivision / condominium will be required. A plan of subdivision / condominium can be residential, commercial or industrial in nature and must comply to the polices of the PPS, the local Official Plan, relevant Secondary Plan (if there is one) and the local zoning by-laws respecting lot configuration.

The key difference between a plan of condominium and plan of subdivision is that the area developed within the plan of condominium is privately owned (including roads, parks, sidewalks, etc.) by the condominium corporation. As the lands are privately owned, they are not required to meet municipal standards respecting public streets and amenities. A challenge seen in some municipalities is an increase in condominium developments as it is a way to reduce infrastructure costs associated with building to a public street and amenity standard. Without explicit requirements for sidewalks or other pedestrian amenities on multi-unit private developments such as condominiums, a municipality may see large developments without such amenities (McIntosh, J. 2013).

A subdivision plan is built to municipal standards and is one of the key development process that implements municipal land use priorities. For example, the street layout, lot configuration, provision of

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⁷ MMAH, 2013

street lighting and sidewalks, location of parks and trials, and setting aside blocks of land for multiple lands uses can work together to promote a community that is either 'walkable' or 'car-dependent'. At the time of pre-submission consultation, municipalities can emphasize that developments are to be built around pedestrians (Manley, C. 2013). Further, planning policies can include incentives to encourage progressive subdivision design, such as permitting the amount of land used for trail linkages to be used towards parkland dedication requirements (ibid). At the time of submission, a review of the subdivision application, staff and agencies will evaluate how well the plan conforms to the local Official Plan, the PPS and any other relevant Provincial Plans. This development application is also a public planning process, where members of the public living in the immediate area are invited to attend the formal public meeting and make comments.

Opportunity for Health Intervention:

- To achieve progressive subdivision / condominium design standards, it is important that there is clear and strong policy language in the Official Plan and / or Secondary Plan and clear municipal development standards in place, upon which developments are to be based.
- Consistent implementation will set the tone for local development expectations.
- At the time of application review, the local Health Unit could be requested to review and advise how well the design achieves municipal goals respecting active living and healthy living.
- Opportunities exist for public input and comment in the application process. The local Health
 Unit could evaluate the subdivision / condominium design relative to the goals of the
 municipality respecting active living and healthy communities.

Zoning By-laws⁸

While an Official Plan is considered a high-level policy document, a municipal zoning by-law is the on-the-ground implementation of the rules and restrictions to which development must comply. Zoning

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⁸ MMAH, 2013

by-laws typically conform to the policies of the Official Plan. That being said, while a change to an Official Plan designation requires the associated zoning by-law(s) be amended thereafter, there may be a lag-time between when zoning by-laws are updated relative to larger Official Plan Amendments (or comprehensive changes due to a five year review and update).

Like Official Plan and Secondary Plans, zone change applications require public meetings and notice.

A zoning by-law may include a list of permitted uses, both minimum and maximum development standards relative to the location of buildings and structures on a lot, lot dimensions, height, parking, required distance from incompatible land uses, etc. It may also restrict the use or activity on land until particular studies are completed and approved.

All building permits are vetted for conformity to the relevant zoning by-law(s). In the event that a proposal does not comply to a zoning-by-law, an application for a zone change or minor variance may be required.

Opportunity for Health Intervention:

- All base zones would benefit from a review by the municipality and agencies such as the Health
 Unit to determine how well they implement the health related goals of the Official Plan and or
 Secondary Plan.
- The Health Unit could be asked to review each specific zone change application for consistency with the health related goals of the Official Plan and or Secondary Plan.

Site Plan Control⁹

Section 41 of the Planning Act provides regulatory authority to municipalities to include within their Official Plan that certain areas or land uses are subject to Site Plan Control (SPC).

SPC provides further design control on the development of building and structures on a lot. Based on character, scale, appearance, streetscape design and compatibility concerns, SPC may guide the layout, orientation, size and configuration of buildings and structures, services, storm water management, parking and boulevard areas of the site. Often, municipally approved design guidelines (see below for more information), in addition to the zoning by-law, provides the development and design standards to which SPC applications are to be based upon. Further, development may be secured by a performance agreements registered on title and securities may be held to ensure compliance. Site Plan Control has come to be a key development tool to help municipalities achieve design objectives and performance standards.

SPC may be implemented for both new developments and re-development. SPC is particularly important for ensuring re-development projects reflect the existing or planned neighbourhood character and design standards identified in the Official Plan or Secondary Plan.

Unlike other planning applications, a mandatory public planning is not required for a SPC application. However, while OP policies may require public notice or a public meeting for SPC applications, neither is mandatory under the <u>Planning Act</u>. In fact, the <u>Planning Act</u> allows Council to designate staff as the Site Plan Control approval authority. In addition, only the applicant or the municipality may appeal a decision of Site Plan Control. Finally, it is unusual for SPC to be applied to single detached residential

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⁹ MMAH, 2013

development, rather it is typically applied to medium to high density residential developments, commercial and industrial developments.

Opportunity for Health Intervention:

- Site plan applications should be reviewed for consistency with any health related goals of the Official Plan, Secondary Plan, and municipally approved Design Guidelines.
- Where there is a SPC committee that reviews and makes recommendations on SPC applications, a member of the local Health Unit could be included as a committee member.
- Where a municipality chooses to undertake the development of a 'design guideline' document, this design guideline document has the potential to significantly impact how well developments will promote active living. As such, Health Units may be an important source of contribution (both financial and personnel resources) to the development and implementation of this document.

Community Improvement Plans / Areas 10

Community improvement, in general terms, involves planning, designing, subdividing, clearing, developing, reconstructing or rehabilitating a specified area of a municipality. Community improvement planning is generally intended to address municipal or regional planning objectives within specific, defined areas through municipally-driven and/or incentive-based programs.

Section 28 of the <u>Planning Act</u> states that municipality may, within a Community Improvement Plan (CIP):

- designate specific or broad areas for community improvement;
- acquire, hold, clear, grade or otherwise prepare land for community improvement;

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¹⁰ MMAH, 2013

- construct, repair rehabilitate or improve buildings on municipal land;
- sell, lease or otherwise dispose of municipal land;
- provide grants or loans to owners or tenants to pay the whole or any part of identified eligible costs; and
- provide property tax assistance for environmental remediation purposes.

A common program within a municipal CIP involves the granting back of taxes to offset an increase in taxation resulting from physical improvements made to a property within a defined CIP area. Generally, this type of program applies to certain classes of development (i.e. commercial, institutional, industrial) and involves 'granting back' all or part of the increased taxes for a defined period of time.

Section 28 of the <u>Planning Act</u> also empowers the Council of a lower-tier or local municipality to designate community improvement areas and develop CIPs in accordance with the Act. Upper-tier municipalities have not been given these general powers, however, certain upper-tier municipalities, as prescribed by the <u>Planning Act</u>, may also develop CIPs, although an upper-tier CIP may only deal with a limited range of matters, including: infrastructure (which is within the upper-tier's jurisdiction); land and buildings adjacent to existing or planned transportation corridors that have the potential to provide a focus for higher density, mixed use development and redevelopment; and affordable housing.

Typically CIP's have targeted the redevelopment of older residential, downtown or industrial areas of population centres within a municipality. However, several municipalities have created Rural CIP's based on a desire to provide assistance to agriculturally related, on-farm diversified, or resources-based businesses located outside of population centres (Manley, C., 2013 and McIntosh, J., 2013). Further,

some municipalities specifically note a deficiency or disrepair of recreational facilities, parks and open spaces as sufficient justification for an area to be included within a CIP area (Manley, C., 2013)

Approval of both CIP and SPC applications may be based on conformity to a foundational design study that has been completed for the municipality as a whole or for a certain areas of a municipality. The preparation of a design study provides the foundation upon which loans and grants are to be made in relation to improvements to specific lands and buildings. Foundational design studies are usually based on principals of improving the 'livability' or 'vibrancy' of a community, ensuring development is efficient and sustainable and / or that the special character or 'heritage' of a community is identified, enhanced and / or protected, etc. For example, streetscape design considerations may be identified as assisting in the promotion of walking in general and walking in a downtown area in particular. Therefore, provision of street trees and furniture, inclusion of architectural building details in façade improvements and boulevard plantings may be design features that could be promoted through the SPC approval process or the provision of CIP incentives.

Opportunity for Health Intervention:

- Where a design committee reviews and makes recommendations on a CIP application, a
 member of the local Health Unit could be included as a committee member to ensure
 conformance with health related guidelines.
- The local Health Unit could be included in the creation of the design guideline document.
- The <u>Planning Act</u> could be amended to grant all upper-tier municipalities the ability to create CIP programs. This would ensure that County priorities could be further encouraged by way of incentives and work to promote consistency in approach.

- Official Plan policies could provide for the deficiency or disrepair of recreational facilities, parks and open spaces as sufficient justification for an area to be included within a CIP area.
- Rural CIP programs could provide assistance to agriculturally related, on-farm diversified or resource-based businesses located outside of population centres.

Additional Relevant Legislation¹¹

While development applications are guided by the planning processes identified in the <u>Planning Act</u> and are required to be consistent with the PPS, 2014, this is not to say that they exist outside the jurisdiction of other legislative and regulatory acts and policies. Often times, developments are simultaneously subject to multiple legislative and regulatory acts and framework, such as the Conservations Lands Act, the Environmental Assessments Act, the Aggregate Resources Act, etc. As such, these applications may be subject to multiple opportunities for public and agency review and / or comment and it would be impossible to list all of the opportunities for public and agency input into all types of development applications.

Opportunity for Health Intervention:

- All local development activity should be monitored, as possible, for opportunities to encourage development patterns conducive to physical activity.
- An example of an application subject to multiple legislative acts: aggregate applications are common in some rural communities and are subject to, in most cases, multiple planning application processes, such as the Aggregate Resources Act and the Environmental Assessment Act. The conditions of approval may include such items as the location of truck routes, operation times and the protection of natural features. Suggestions to shorten truck routes or

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¹¹ MMAH, 2013

requiring road improvement (such as paving road shoulders) may enhance the perception of public safety along the truck routes and may prevent a decrease in the use of such routes for walking and cycling as can sometimes happen along aggregate truck routes.

CHAPTER THREE - RESEARCH PROJECT

Research Methodology

This paper employed a mixed method research technique whereby the paper includes a literature review, a policy review and several key informant interviews. The research was developed and executed concurrently with a larger research project undertaken in partnership between the University of Guelph and the Chatham Kent Public Health Unit, called 'Evidence Informed Strategies and Models of Practice for Healthy Rural Built Environments' with the purpose of augmenting this larger project with a specific case study policy analysis.

The first step of this research was to undertake a literature review of the relationship between the built environment and physical activity, specifically as it relates to rural, rather than urban areas. This review included both scientific articles and grey literature (documents produced by or on behalf of municipalities, Health Units, provincial and federal agencies etc.).

The next step of the project was to determine how many municipalities to pick for inclusion into the case study. In consultation with this project's advisor, it was felt that four case studies provided an adequate basis for a meaningful comparative exercise. Including more than four case studies would result in a more superficial rather than in-depth analysis. Any less than four would not provide enough comparative fodder. Further, the decision was made to include only upper tier / single tier municipalities as the intent of the policy analysis was to investigate planning policies dealing with a multitude of landscapes, resources and populations (i.e. both rural and small town centres).

The actual decision on which municipalities to include in the study was undertaken concurrently with the University of Guelph/Chatham Kent Project. The purpose of this larger project was to identify innovative strategies and models of practice for land use planning policies, procedures and designs relating to the built environment to improve population health outcomes in rural communities. It asked almost all municipalities in Ontario (by way of an on-line survey) to identify best practices or innovative practices within their jurisdiction relating to the promotion of 'healthy communities'.

In total, 81 municipalities responded, of which only 8 upper tier / single tier municipalities identified themselves as being innovative. One additional single tier municipality (Norfolk County) identified itself as have a best practice related to physical activity. From these respondents, four were selected for inclusion in this subject research project. While it was desired that the chosen municipalities reflect Ontario's diverse geography, it was not mandatory, nor expected that the four fully represent Ontario. The most important factor in choosing the municipalities was that they self- identified as doing something 'innovative' or had a 'best practice' related to physical activity.

After choosing the four municipalities, a full review of the Official Plan Policies of each were undertaken. All policies that related to physical activity, both directly and indirectly were documented and further categorized into a matrix table of themes and land use planning tools (see template - Appendix 1). At this stage, by way of an internet search, additional municipal documents were located where possible to provide information on the municipality itself and additional municipal led initiatives, strategies or plans that may influence physical activity.

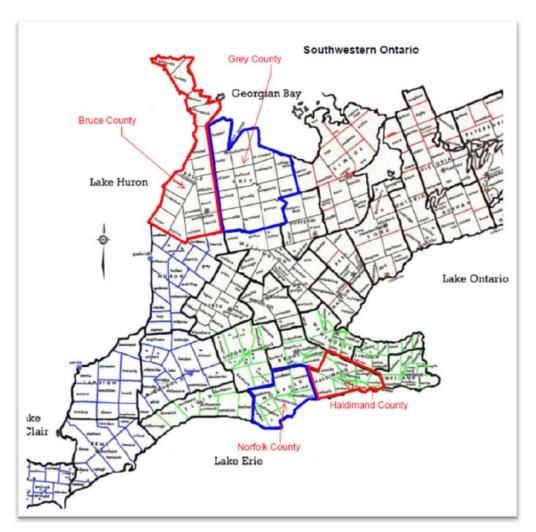
Finally, in advance of the key informant interviews, a brief questionnaire was developed that included both quantitative and qualitative questions to guide the interviews (see Appendix 2). This questionnaire was developed with three purposes in mind: 1) to ensure correct and complete collection and interpretation of policy documents; 2) to collect an understanding of the community context; and 3) to collect perceived strengths and weaknesses of both the individual policies and their implementation. A draft version of this questionnaire was sent for review to a number of land use planners for input. A number of comments and suggestions were made and the questionnaire was revised accordingly. This final version of the survey was again circulated to several planners for comments. Failing to receive any additional comments, this version of the questionnaire was finalized.

For the purpose of identifying the land use planning key informants, those who responded to the Guelph / Chatham Kent survey were contacted and asked to participate in the subject research project. All those who were asked to participate were Planning Directors and all agreed to participate. In advance of the interviews, the Directors were sent the Official Plan summaries and the matrix table. In addition, they were sent the questionnaire in advance in the interest of expediting the interview process. The interviews were conducted on November 6th and 8th, 2013.

Municipalities

All four of the chosen municipalities are located in South Western Ontario and include significant amounts of coast-line along the Great Lakes. Two of the municipalities, County of Norfolk and Haldimand County, are located in the central-eastern part of southwestern region of Southern Ontario, while two County of Bruce, County of Grey, are located in the northern part of the region. Figure 1. below shows the location of the municipalities relative to Southwestern Ontario.

Figure 1. Map of Subject Counties



Source: http://globalgenealogy.com/countries/canada/ontario/resources-ontario-map-of-counties.htm

All four municipalities are experiencing many of the population trends that typify rural Ontario, relative to Provincial trends, having an:

- Aging population;
- A larger dependent population, as working aged people continue to move out of the rural area and into population centres;
- Little or negative population growth between 2006-2011; and
- A low population density

The County of Grey is an upper tier municipality comprised of nine lower tier municipalities in the northern part of the Southwest region of Ontario. It is bounded by Georgian Bay to its north and east, the County of Bruce to its west and Simcoe and Wellington County to its South. It includes an area of 4,508 km² and a population of 92,568 in 2011 (Statistics Canada). This constitutes a 0.2% increase from 2006. It's population density of 20.5 people per kilometer square. The median age of the population is 47 years and 53.5 % of its population lives in a rural area¹²

Bruce County is also located in the northern part of the Southwest Region of Ontario, bounded by Lake Huron to the west, Georgian Bay to the north and County of Huron to its South and Grey County to its east. Bruce County is an upper tier municipality and includes, within its jurisdiction, eight lower tier municipalities. It includes a land area of 4,508 km² square and 2,400 km of Great Lake coastline. In 2011, it had a population of 66,102 and this constituted a growth of 1.2% since 2006. It has a similar median age and % rural population to that of Grey County. Both Grey and Bruce County are known for their full season outdoor recreational activities. Portions of both Counties are subject to the Niagara Escarpment Plan.

Haldimand and Norfolk County are located on the opposite side of Southwest Region of Ontario, along the north shore of Lake Erie. They also include significant amounts of coast line and associated recreational opportunities. Haldimand County is bound by the Niagara Region to its east, Hamilton and Brant County to its north and Norfolk County to its west. In 2011, Haldimand County had a population of 63,175 which represented 1% growth from 2006. The median age of its population was 46 years while almost 20% of its population was above 65 years and 52% of its population lived in a

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¹² A 'rural' area is defined as being land outside a population centre. A population centre is defined as having a population greater than 1,000 people and a density greater than 400 people per square kilometer (Statistics Canada, 2013)

rural area. Haldimand County is a single-tier municipality and subject to the Provincial 'Places to Grow' Growth Plan.

Norfolk County, located directly to the west of Haldimand County, is also a single-tier municipality. Elgin County is located to its west, while the County of Oxford and Brant County is to its north. Norfolk had a population of 63,175 in 2011, of which 55% lived in a rural area. Norfolk's population decreased by -0.7% since 2006. The County had the youngest population of all four municipalities, being that its median age was 43 years and it had the smallest percentage population above +65 years.

Table 2. Population Statistics¹³

	Norfolk	Haldimand	Bruce	Grey	Canada	Ontario
Population	63,175	44,876	66,102	92,568	33,476,688	12,851,821
% Change						
Between 06 – 11	1%	-0.7 %	1.2 %	0.2%	5.9 %	5.7 %
Median age	46.1	43.1	47.0	47.3	40.6	40.4 %
% Population Above 65	19.3%	15.7 %	20 %	21.1 %	14.8%	14.6 %
% Population						
15-64	65.4%	67.1 %	64.8 %	63.8 %	68.5%	68.4 %
% Population 0-14	15.3%	17.2 %	15.1 %	15.1 %	16.7 %	14.6 %
Land Area	1,607 km²	1,251 km ²	4,087 km²	4,508 km ²	8,965,121 km²	908,607 km²
Population	20.2	25.0	16.0	20.5	2.7	141
Density	39.3	35.9	16.2	20.5	3.7	14.1
% Population Rural	55%	52 %	52.6 %	53.5 %	18.9%	14.1 %

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¹³ Census Canada, 2013.

Background

The Official Plans of Grey County, Bruce County, County of Norfolk and Haldimand County were

reviewed to compare their various land use policies relative to the promotion of healthy communities

(by way of enhancing physical activity).

Haldimand County and the County of Norfolk are both single tier municipalities formed in 2001 as a

result of restructuring the former Regional Municipality of Haldimand-Norfolk. Haldimand County

consists of the Towns of Dunnville and Cayuga, and the eastern portion of the City of Nanticoke. The

County Official Plan was approved by Council in 2006, the Province in 2009 and includes over 27

subsequent amendments, including a recent Active Transportation Official Plan Amendment (OPA).

The County of Norfolk consists of the Townships of Norfolk and Delhi, the Town of Simcoe, and the

westerly portion of the City of Nanticoke. The County Official Plan was approved by Council in 2006,

the Province in 2008 and 2010 and includes over 37 subsequent amendments.

Bruce County is an upper-tier municipality and consists of eight lower-tier municipalities. The County

Official Plan was approved by County Council in 1997, the Province in 1998 and the Ontario

Municipal Board in 1999. Its first 5 year review was approved by the Province in 2010. The County

OP acts to provide a policy framework to which the lower-tiers can create their own, more detailed

Official Plan or Secondary Plans. Essentially, the County OP works to provide policy direction for the

rural areas where those more urban lower-tier municipalities have their own local OP's or Secondary

Plans.

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Grey County is an upper-tier municipality and consists of nine lower-tier municipalities. The County was re-structured in 2001. Official Plan was approved by County Council in 1997, the Province in 1998 and the Ontario Municipal Board in 2000. It includes several subsequent amendments. Like Bruce County, Grey County's OP also acts as a policy framework to which the lower-tiers can create their own, more detailed Official Plans or Secondary Plans. The Grey County OP provides policy direction for the rural areas while the more urban lower-tier municipalities have their own detailed OP's or Secondary Plans.

Official Plan Higher Order Goal / Visioning Statement

All four municipalities include high-level policies on enhancing the quality of life of their residents. The strength of this language varies amongst the municipalities. It is noted that Official Plans typically rely on the term 'recreation' to denote physical activity.

The County of Bruce includes in Section 3.2 and 3.4 of its Official Plan statements on the promotion of quality of life: "The Vision of the County of Bruce is one which protects the quality of life of Bruce County while ensuring the growth and sustainable communities are based upon diverse economic opportunities which respect the natural environment." This vision seems to view recreation as an opportunity to enhance tourist opportunities and quality of life standards.

Grey County includes within its Official Plan an example of a particularly strong higher-order vision statement: "It is the fundamental policy of this Plan to promote healthy and diverse communities where residents live, work and enjoy recreational opportunities" (Section 1.7). This statement seems to link recreation equally to both health and lifestyle goals and recognizes tourism as its associated economic benefit.

The County of Norfolk includes language respecting healthy communities in Section 1.2 (a): "This Plan is premised on sustainability principals which rose out of the visioning and strategic planning sessions that initiated the process. The principals of sustainability applied to this plan ensure an interconnected and balanced approach to public policy, focusing on efforts to ensure continued economic viability, maintain healthy communities and enhance the County's natural environment". Additional language on healthy communities is not found until Section 7 of the OP called "Maintaining Healthy Communities." As a result, the Plan acknowledges the importance of 'healthy communities' but it conveys a message that it is one of many goals being balanced and not a primary goal or a common thread underlying planning policy.

Haldimand County's Official Plan cited six (6) themes upon which its OP is based, one of which is "Leisure, Culture and Heritage". Here in, 'recreation' is linked to lifestyle and tourism and its associated economic potential. Active living is not a primary goal or thread through-out the OP. That being said, Haldimand recently passed an Active Transportation Official Plan Amendment in which it states: "Walking and cycling are recognized as alternative modes of transportation that can play a valuable role in improving mobility and quality of life as part of a balanced transportation system" (OPA 5.2.1). While this OPA makes numerous changes to the OP which will add to the theme of active lifestyle to certain sections of the document, the higher-level goal oriented section of the OP could benefit from stronger language on the importance of creating communities that promote active living.

Definitions

Official Plans typically include a definition section that may be used in reference to terms found frequently in the plan. With respect to recreational policies, there appears to be a number of terms used

to describe the various forms of recreation, the nuances between which may be lost to those unfamiliar with planning jargon. For example, all four municipalities refer to terms such as 'passive' and 'active' recreational uses. While land use planners may expect that passive recreational uses include green spaces and trails lacking formal recreational infrastructure, those outside the planning profession may not know that. Haldimand County's OP provided no definitions of recreation, while the County of Norfolk included specific definitions of various park forms such as 'parkettes', 'neighbourhood parks', 'community parks', and 'lakeshore parks', but failed to distinguish between 'passive and active open space and recreational uses', 'passive and active open space and recreational uses'.

Furthermore, terms should be uniformly used in an Official Plan. In Grey County for instance numerous terms were used to describe recreational forms, including: public recreation, passive public space, public and private parks, passive recreational use, and resource based recreational use. Only the terms 'resource based recreation' and 'recreation' were defined.

Permitted Uses in Designations

All Official Plans include sections on 'permitted uses' in each land use designation. Given that all of the municipalities are predominately rural in nature, it was striking that Haldimand and Grey County did not include policies on permitting 'recreational uses' in Agricultural Areas. Bruce County permits 'public open space' and 'passive recreation' while Norfolk County permits 'public or private open space and recreational uses' in Agricultural Areas. In 'Rural Areas', Bruce County permitted 'Space extensive recreational and space extensive commercial recreational uses' while Grey County permits 'resource-based recreational uses' within Rural Areas. Only Haldimand and Norfolk County permits some form of recreational use in Industrial Areas, while only Haldimand County permits recreation in

an Aggregate Extraction Area. Within Urban Areas, various forms of recreational facilities and centres are permitted in all municipalities.

Table 3. Recreational Uses Permitted by Designation

Designation	Haldimand	Norfolk	Grey	Bruce
Agricultural	No policies	Public or private open space and recreational uses	No policies	Public open space and passive recreation
Industrial	Public Parks and open space linkages	Parks and Open Spaces	No policies	No policies
Rural	No Rural Designation	No Rural Designation	Resource based recreational uses	Space extensive recreational and space extensive commercial recreational uses / public parks and open space
Hazard Lands	Outdoor recreation, parks, golf courses and open spaces (with or without buildings and structures)	Small-scale outdoor recreational uses such as parkettes, excluding golf courses	Resource based recreational uses	Passive recreation (not including golf courses) and public parks
Significant and or Natural Heritage Features	'Compatible recreation', outdoor education or research activities, recreational facilities that do not require site alteration	'Compatible recreational activities'	No policies	Existing public recreational uses
Lakeshore / Waterfront	Outdoor recreation, boardwalks, trails and parks	Passive and Active open space and recreational uses / Private and public recreational uses, parks	Resource based recreational uses	Resource based recreational uses permitted in inland lake development area only
Settlement Areas	Recreational facilities	Recreation and Open Space, parks, neighbourhood parks and parkettes	Recreation, public recreation, trail system,	Recreational facilities and centres
Aggregate Extraction	Recreational facilities, provided they do not affect extraction area	No policies	No policies	No policies

Park and	Community Parks,	Large scale	Passive	Outdoor recreation
Open Space	Neighbourhood	recreational	recreational, trails,	
	parks, conservation	facilities, arenas,	public and private	
	areas, walking	community centres,	parks	
	trails, facilities for	golf courses,		
	outdoor and indoor	community parks,		
	sports	major parks		

Mixed Land Uses

As discussed above, research has suggested that communities that include a variety of lands uses promote active transportation. Accordingly, the Official Plans for each of the municipalities were reviewed for promoting a mix of land uses. While most municipalities included some form of policies that promote a mix of land uses, most policies were geared to urban areas. One important exception to this is that three of the four municipalities included policies that that support the multiple use of utility corridors, including for recreational purposes.

Within its Growth Management Section of its OP (Section 4), Haldimand County included several policies that encourage the mix of land uses in urban areas, such as the following:

- Mix of residential, commercial, industrial and other land uses within urban areas are
 encouraged and shall be built in a compact form which is appropriate for pedestrians, promotes
 walking and cycling and where feasible reduces the dependence on the automobile (Section
 4.B).
- New residential neighbourhoods shall be designed with a road pattern, streetscape, built form and mix of uses which supports and promotes walking and cycling" (Section 4.B.2.12).

Within its Community Building of its OP (Section 5), Haldimand County also includes policies that encourage the mix of land uses in rural areas, such as the following:

- County encourages multiple use service corridors for major servicing infrastructure for secondary purposes where appropriate and feasible, such as recreation (Section 5.D.5).
- County will encourage the development and enhancement of pedestrian trails and bicycle routes, as well as connection to sidewalks, pathways, walkways and trails among the community and with recreational facilities within the municipality as part of on-going capital works (OPA 5.A.2.2).

Within Norfolk County's OP, several policies encourage a mix of land uses in its urban area, including:

- Urban area expansions will have a compact form, an appropriate mix of land uses, where practical and densities that efficiently use land, infrastructure and public facilities, while providing for adequate parks and open space (Section 3.4(f)(iv)).
- Linkages between Downtown Areas and recreational trails shall be encouraged to foster pedestrian activity and encourage tourism in the Downtown Areas (Section 3.4.1 (i)).
- The County shall strive to create transit-supportive, compact urban form consisting of mixed uses and efficient transportation networks (Section 6.5(g)).
- The County shall work towards providing bicycle and pedestrian paths, separated from the roadway on existing and proposed roads, on abandoned rail corridors, on utility corridors and within parks and open spaces as appropriate. (Section 8.3(a)).

Grey County's OP, does not include specific policy language on encouraging or requiring developments to have a mix of land uses beyond its statement that the fundamental policy of its Official Plan is to "promote healthy and diverse communities where residents live, work and enjoy recreational opportunities". Thus, unlike some of the other Policy documents being reviewed that include several policies promoting a mix of land uses throughout the document, it may be the intent that the above

statement is to be read as an underlying policy upon which all others are based on and to which the lower tier Official Plans are to be based on.

Like Grey County, Bruce County includes few policies specifically encouraging a mix of land use within its Official Plan. It does however support the multiple use of utility corridors for uses such as recreation (Section 4.7.4.5). Further, both Grey and Bruce County rely upon the lower-tier municipalities to include more detailed policies respecting urban areas and therefore, one may expect that detailed policies such as those found in Norfolk and Haldimand County are to be found within the lower-tier OP's.

While the goal of providing a mix of land uses within settlement areas is a common goal in all of the OP's reviewed, such a goal does not extend to the rural and agricultural areas. This is not surprising as the Province, by way of the PPS, 2014 has stated that such areas are to be protected and used for largely agricultural and agriculturally-related uses and further, they are to be protected from incompatible land uses. Two exceptions to this policy is the support for multiple use of existing or abandoned utility corridors and for on-farm diversified or agriculturally related uses on rural or agricultural land.

Urban Design Guidelines

As discussed above, the importance of urban design implemented at the plan of subdivision, site plan control or by way of a community improvement incentive program has the potential to have a significant role in making a municipality more conducive to physical activity. All of the municipalities include Official Plan policies relating to design standards.

Haldimand County includes an urban design section of in its Official Plan and states specifically that urban design "contributes to and guides, among other things, pedestrian walkways and bicycle paths" (Section 5.B.G). It further states that the County will undertake to establish an urban design guideline and that once established, development proponents will be required to develop in accordance with the guidelines. New residential, commercial, industrial, business parks, institutional buildings, and parks and recreational facilities are to adhere to the urban design guidelines. Further, Haldimand's Active Transportation OPA, includes design guidance to enhance pedestrian and cycling activity by way of appropriately scaling block and road patterns, adding or enlarging rights of ways, enhancing streetscapes, lighting and accessibility features. To this end, the County has adopted the 'Haldimand County Streetscape Plan and Urban Design Guidelines' in January 2010, and have drafted area-specific guidelines, being the 'Dunnville Secondary Plan and Urban Design Guidelines' and the 'Jarvis Street Urban Design Guidelines'.

The County of Norfolk includes within its Official Plan, a section titled, "Maintaining Healthy Communities". Within this section, it includes several policies related to community design and states, "Excellence in community design is essential to creating a physical environment where people have the appropriate places to interact, live, work, recreate and learn" (Section 7.4). The County promotes the physical character, appearance and safety of streetscapes, civic spaces and parks. In addition, Section 7.4 (j) & (k) includes the policies stating that, "the County may require the provision of certain pedestrian, cycling and trail linkages through the development approvals process and that in consultation with development proponents, the County shall define a style of street furnishings that should include shared and accessible bicycle racks, garbage receptacles, benches and street lands to be used in new development". The Lakeshore Special Policy Area Secondary Plan also includes very general community design guidelines.

Grey County's Official Plan suggests a 'complete streets' design model for new plans of subdivisions and condominiums (Section 6.12.1). Like the County of Norfolk and the County of Haldimand, urban design guidelines have also been included in a Secondary Plan (Georgian Villas). This particular Secondary Plan includes a number of progressive 'complete streets' design suggestions, including, but not limited to: roadways will be landscaped and attractive streetscapes are to be promoted and constructed to promote accessibility; internal local road network will be designed in a manner that evenly distributes traffic throughout the Secondary Plan area while discouraging through traffic on internal local residential streets; reduces speed and has an attractive streetscape that promotes pedestrian and bicycle use, and; consideration will be given to on-road bikeways which may be provided on the Collector Roads to complement the multi-use trail system.

Finally, Bruce County's Official Plan includes the promotion of sustainable design elements on highways by way of its Site Plan Control (SPC) process and to that that end, it identifies the whole of the County as a proposed SPC area. It states that specific areas and uses subject to SPC will be designated in future by-laws. Bruce's OP is silent in describing the nature of 'sustainable design elements'. That being said, the County of Bruce has implemented a locally driven community design program, called 'Spruce the Bruce' (Laforest, C., 2013) www.brucecounty.ca/business/spruce-the-bruce.php. This design program is not specifically directed by policies of the OP. Rather, the program provides organizational support for local communities in the form of design services, policy research, action plan development and grants. Its goal is to create positive change to support livable, economically viable communities. Each community is given an opportunity to define its own unique character and contribute to creating its own complementary design standards. The program focuses on the downtown cores of its communities with the intention of making them more attractive, pedestrian-friendly, and distinctive.

This appears to be a unique approach to design standards in Ontario, but one that is quite successful, recently winning the 2013 BIA National Achievement Award (ibid).

Relevant to this section of the discussion, as Bruce and Grey County are upper-tier municipalities, they do not have authority under the Planning Act to implement Community Improvement Plans (CIP). As urban design guidelines are typically implemented by way of a CIP, local municipalities may include more direction on urban design within their own local Official Plans. Haldimand and Norfolk County, both being single-tier municipalities have the authority to implement CIPs. Haldimand County has created a successful community improvement plan for its settlement areas, and it has even created a specifically rural CIP programme, called the 'Rural Business and Tourism CIP' programme to promote not only rural businesses but also on-farm diversified and value-added agricultural businesses in the countryside (Manley, C., 2013) www.haldimandcounty.on.ca/OutCounty.aspx?id=20005.

Trails Policies

The Counties of Haldimand, Norfolk and Bruce County included specific sections in their OP on active transportation / promotion of walking and cycling or recreational trails.

As noted previously, the County of Haldimand recently passed an extensive Official Plan Amendment as a result of a recently completed Trails Master Plan. This OPA introduces or strengthens a number of policies that recognize the importance of its trails to promote economic opportunities and the health and vibrancy of its community (Manley, C., 2013). It also outlines policies to enhance the existing trail system.

Bruce County received funding from the Ministry of Health for a 'Trail's Strategy' (Laforest, C., 2013). Unlike a 'Trails Master Plan' this trails strategy began with an assumption that trails are important to the community (based on a long history of community trail use) and largely comprised an in-house asset mapping exercise. The intended end-product is an interactive trail mapping tool that is available to the local trail associations to upkeep and maintain and upon which trail marketing can be based (ibid). Given that rural municipalities are often subject to funding constraints, this approach was considered a more pragmatic and efficient use of funds (ibid).

Bruce County's OP encourages the conversion of railway rights-of-way for public uses, including recreational trails and utility corridors. Trails for both motorized and non-motorized forms of recreation are encouraged, recognizing that time spent outdoors on snow machines or 4-wheelers provide incidental opportunities for physical activity, similar to that incurred while horse-back riding. Further, Bruce's OP policies encourage its local municipalities to permit trails through their rural areas without requiring a zoning amendment (Section 4.6.5).

It is noted that some of the lower-tier municipalities within Bruce and Grey County have completed their own Trails Master Plan and have incorporated the recommendations into their own local Official Plans.

Finally, the County of Norfolk has also recently completed a Trails Master Plan, however since its completion, staff are unsure how much of the Plan has been implemented (McIntosh, J., 2013). However, the existing OP already includes a specific section (Section 8.3) that supports walking, eyeling and trails, and includes policies, such as:

- The County shall work towards providing bicycle and pedestrian paths, separated from the roadway, on existing and proposed roads, on abandoned rail corridors, on utility corridors and within parks and open spaces, as appropriate and feasible;
- The County shall consider adapting roads to provide safer travel for bicycles, where feasible and appropriate;
- The County shall undertake to interconnect existing walking trails and bicycle paths, where feasible and appropriate;

Recreation Policies

The County of Norfolk was the only municipality to include within its OP, specific standards for parks and recreational facilities, including a minimum size based on population, facility characteristics and amenities. While park standards likely exist in the other municipalities, they may be included in documents such as a municipal Parks and Recreation or Leisure Study.

Haldimand County also includes within its OP a specific section on Parks and Open Space (Section 6.A). This section includes the stated intent to develop a County-wide Leisure and Recreation Master Plan and includes general policies on the differences between community parks, neighbourhood parks, locational criteria and associated amenities required.

Parkland Dedication / Hazard Land Policies

The <u>Planning Act</u> requires at the time of development ('development' being the subdivision of land by way of a plan of subdivision or condominium or by consent) that a certain percentage of land (typically 5 %) be provided at no cost, to the municipality towards the provision of parkland. However in the event that such land is not required or unsuitable for such dedication, a % value of the land is to be

given to the municipality in lieu of parkland (cash-in-lieu). Municipalities have various policies relating to whether they accept hazardous / valley land as partial credit towards the required parkland dedication. Granting a partial credit for the dedication of hazardous / valley lands, where such lands are important as a natural heritage corridor or trail corridor can be one method the municipality could incentivize the use of lands for passive trail purposes. This may be particularly important to rural municipalities who find it challenging to leverage such amenities otherwise, as is often the case in municipalities with little development competition.

Norfolk, Grey and Bruce County all state that parkland dedication is as required by the <u>Planning Act</u> and that Hazard Lands shall not necessarily be accepted as part of the parkland dedication.

Only Haldimand County includes in its OP a policy that allows the County to consider the taking of valley lands (if used for trail purposes), wooded areas, significant cultural heritage resources or other lands that may be otherwise unsuitable for development, as partial credit towards the required parkland dedication. Further, trail development may be a reason the County may require land dedication (Section 6.B.1(d)).

Transportation / Utility Corridors

Bruce, Norfolk and Haldimand Counties include policies on the multiple use of utility corridors for recreational / trail purposes. These corridors include existing utility corridors and abandoned railway rights of ways for the provision of bicycle and pedestrian paths.

Foundational Studies

As described in the planning section of this paper, many 'foundational studies' feed into the municipal Official Plan, as part of a 5-year review process, stand-alone amendments, or during the creation of a new Official Plan. These foundational studies may be under the direction of a department other than Planning, however they may include elements that may be incorporated into the Official Plan.

Such foundational studies may include: a Transportation Master Plan, Transit Master Plan, Goods Movement Master Plan, Parks and Recreational Master Plan, Population, Housing and Employment Projections, Servicing Master Plan, Community Design Plan, Community Improvement Plan, Cultural Master Plan, Strategic Plan, Cycling Master Plan, Active Transportation Master Plan, Integrated Community Sustainability Plan, Affordable Housing Plan, Environmental Assessments, Natural Features Master Plan, and Subwatershed Master Plan. While this list is not exhaustive, it demonstrates the range of municipal studies that have the potential to impact how physically active community members may be. Further, they all include public input processes and their recommendations and findings may be incorporated into the County Official Plan.

It should be noted that within a two-tier municipal structure, lower-tier municipalities may undertake their own studies to feed into their own OP or a County's OP and as such there may be fewer County-wide studies within two-tier municipalities than single-tier or regional municipalities. Further, municipalities that find themselves financially restrained (as is common in rural areas), studies that do not result in concrete, measurable outcomes are likely to be passed over in favour of more targeted initiatives. However, it remains important to understand what foundational studies have been conducted in each of the municipalities:

Table 4. Foundational Studies Completed

	Haldimand	Norfolk	Grey	Bruce
Strategic Plan	In Process of being Updated	Completed	Completed	Completed
Leisure /	Yes, needs	Not completed	(at the lower-tier	Yes, needs
Recreation	updating		level)	updating
Transportation	Not completed	Not completed	In process: Transportation / Goods Movement & Active	Not completed
Active Transportation	Completed	Not completed	Transportation MP In process: Transportation / Goods Movement & Active Transportation MP	Trails Strategy in process
Servicing	Not completed	Not completed	(at the lower-tier level) (at the lower-level)	
Infrastructure	Not completed	Not completed	In process: Transportation / Goods Movement & Active Transportation MP	Not completed
Trails	Completed, 2009	Completed, 2009	In process: Transportation / Goods Movement & Active Transportation MP	Trails Strategy in process, some completed at lower-tier level
Natural Feature	In process	Not completed	In process	Not completed

Policy Synopsis

Table 5 (below) describes the Official Plan policies of the four municipalities based on the four aspects of the built environment that impact physical activity, being: 1) population and employment density; 2) diversity of land uses; 3) landscape and street design, and; 4) access to recreational facilities. This table addresses each of the above noted aspects, how each may be tailored to a specific rural context, the foundational studies upon which such policies may be based and the corresponding Provincial policy justification. The policies contained in this table are not intended to be exhaustive list of all policies found in each municipal Official Plan as many policies overlap between the municipalities. Rather, the

policies demonstrate the range in policy approaches utilized by the rural municipalities so that other municipalities may choose between the policies for their own particular needs and context.

Table 5: Official Plan Policy Comparative Table

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Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
Population & Employment Density	 Encouraging intensification of land uses (in terms of housing and employment)may increase walking Replacing low density, sprawling development patterns with more intensified development patterns may reduce commuting time and increasing viability of transit uses Increasing commuting time is associated with increased levels of physical activity 	Section 1.1.1 Healthy, livable and safe communities are sustained by: a) Promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long-term; b) Accommodating an appropriate range and mix of residential, employment, institutional, recreational, park and open space uses; e) Promoting cost-effective development patterns and standards to minimize land consumption and servicing costs Section 1.1.3.1 Settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted. Section 1.1.3.2 Land use patterns within settlement areas shall be based on: a) Densities and mix of land uses which; 1) Efficiently use land and resources; 4) Support active transportation 5) Are transit-supportive, where transit is planned, exists or may be developed b) A range of uses and opportunities for intensification and redevelopment Section 1.1.3.3 Planning authorities shall identify appropriate locations and promote opportunities for intensification and redevelopment where this can be accommodated Section 1.1.3.4 Appropriate development standards should be promoted which facilitate intensification, redevelopment, compact form, while avoiding or mitigating risks to public health or safety	Population, Housing and Employment Projections Study Transportation Master Plan Transit Master Plan Servicing Master Plan Vacant Lands Study Brownfield Redevelopment Strategy Intensification Strategy	 All rural municipalities include both population centres and rural or prime agricultural lands. Servicing may constraint intensification PPS policies direct growth and development to population centres and the protection of prime agricultural land PPS encourages cross jurisdictional coordination respecting multimodal transportation system – especially relevant to rural municipalities Limiting nonagricultural lands encourages development in existing population centres 	 General Density / Transit Policies A mix of residential, commercial, industrial, and other land uses within urban areas are encouraged and shall be built in a compact form which is appropriate for pedestrians, promotes walking and cycling and where feasible reduces the dependence on the automobile (Haldimand County – Section 4.B). The County shall strive to create transit-supportive, compact urban form consisting of mixed land uses and efficient transportation networks (Norfolk County – Section 6.5(g)) An expansion of an Urban Area will be considered in the context of whether the proposed expansion will have a compact form, an appropriate mix of land uses, where practical and densities that efficiently use land, infrastructure, and public facilities, while providing for adequate parks and open space (Norfolk County – Section 3.4(f)) The County supports intensification and redevelopment, primarily within Settlement Areas, and within other areas where an appropriate level of physical services are available (Grey County – Section 1.8(a)) Intensification and re-development is encouraged, taking into consideration location of parks, schools, all modes of transportation including walking and cycling, health and safety among other factors (Bruce County – Section 4.4.4.1v) This Plan and local Official Plans shall promote new developments that involve a mix of housing types and densities that will contribute to an efficient utilization of land and services (Bruce County – Section 4.4.4.5f) Specific Intensification / Density Policies The County shall target approximately 32% of new dwelling units to annually be provided through intensification after 2015 (Haldimand County – Section 4.B.5. The County shall target an average density of 29 persons and jobs per hectare within the designated greenfield area (Haldimand County – Section 4.B.6) County will facilitate intensification by way of development

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
		Section 1.1.4.2 In rural areas, rural settlement areas shall be the focus of growth and development and their vitality and regeneration shall be promoted. Section 1.3.1 Employment – Planning authorities shall promote economic development and competitiveness by: c) Encouraging compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities Section 1.4.1 To provide for an appropriate range and mix of housing types and densities required to meet projected requirements of current and future residents of the regional market area, planning authorities shall: a) Maintain at all times the ability to accommodate residential growth for minimum of 10 years through residential intensification and redevelopment Section 1.4.3 Planning authorities shall provide for an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area by: d) promoting densities for new housing which efficiently use land, resources, infrastructure and public services, and support the use of active transportation and transit in areas where it exists or is to be developed. e) establish development standards for residential intensification, redevelopment and new residential development which minimizes the cost of housing and facilitates compact form, while maintaining appropriate levels of public health and safety.			incentives, including reduced parkland dedication requirements, reduced parking standards, reduced development charges, and as-of-right zoning (Haldimand County – Section 4.8.8(g)(i) The County shall encourage local Official Plans to require a minimum of 30% of all new residential development to occur in the form of medium and high density (County of Bruce – Section 4.4.4.2.5iii(b)) Local official plans shall include policies and designations that: Include criteria for intensification and redevelopment including site plan provisions, locational and land use compatibility criteria; Permit the conversion of larger single-detached dwellings into multiple units; Preserve, improve, rehabilitate or redevelop older residential areas, and; Permit, subject to appropriate criteria and conditions, apartments in houses (County of Grey – Section 1.8) Protection of Agricultural Lands Non-farm development will be encouraged to locate in existing built-up areas in order to protect productive agricultural lands and to support the service centre function of the built-up areas. (County of Bruce – Section 4.4.4.3) Non-farm development related to rural residential development shall not be permitted except in accordance with Section 4.2.3 (County of Norfolk – Section 4.2.1.k)

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey,
			Studies -		and Bruce County
		turn on outstand or outstand or outstand or outstand	Examples		
		transportation system, connectivity within and			
		among transportation systems and modes should be			
		maintained and, where possible, improved including			
		connections with cross jurisdictional boundaries.			
		Section 1.6.7.4 A land use pattern, density and mix			
		of uses should be promoted that minimize the length			
		and number of vehicle trips and support current and			
		future use of transit and active transportation.			
		Section 1.8.1 Planning authorities shall support			
		energy conservation and efficiency, improved air			
		quality, reduce greenhouse gas emissions, and			
		climate change adaptation through land use and			
		development patterns which:			
		a)promote compact form and structure of nodes and			
		corridors;			
		b) promote the use of active transportation and			
		transit in and between residential, employment and			
		institutional uses;			
		Section 2.3.4.1 Lot creation in prime agricultural			
		areas is discouraged and may only be permitted for:			
		agricultural use, agriculturally-related uses, a			
		residence surplus to a farming operation and			
		infrastructure			
		Section 2.3.5.1 Planning authorities may only			
		exclude land from prime agricultural areas for			
		expansions of or identification of settlement areas in			
		accordance with policy 1.1.3.8.			
		accordance with poncy 1.1.3.0.			
Diversity of	People living in	Section 1.1.1 Healthy, livable and safe communities	Economic	Many rural	General Diversity Policies
Land Uses	neighbourhoods or	are sustained by:	Development	municipalities lack a	A mix of residential, commercial, industrial, and other land uses
	communities that include	•	Strategy	mix of residential and	within urban areas are encouraged and shall be built in a
	a mix of land uses may l			employment uses	compact form which is appropriate for pedestrians, promotes
	more likely to rely on	recreational, park and open space uses;	Value-Added	sufficient to	walking and cycling and where feasible reduces the dependence
	1			1 2	and and and and and and and a second a second and dependence

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
	 People living in neighbourhoods or communities that include a mix of land uses may spend less time commuting to work or for utilitarian trips. Diversity of land uses can encourage leisure type physical activities by way of including recreational infrastructure 	Section 1.1.3.2 Land use patterns within settlement areas shall be based on: a) Densities and mix of land uses which; 4) Support active transportation 5) Are transit-supportive, where transit is planned, exists or may be developed Section 1.1.4.2 Healthy, integrated and viable rural areas should be supported by: c) Accommodating an appropriate range and mix of housing in rural settlement areas; Section 1.1.5.3 (Rural Lands) Recreation tourism and other economic opportunities should be promoted. Section 1.3.1 Planning authorities shall promote economic development and competitiveness by: a) Providing for an appropriate mix and range of employment and institutional uses to meet long term needs; b) Providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses; c) Encouraging compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities; Section 1.5.1 Healthy, active communities should be promoted by: b) Planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including	Agricultural Products Study Local Foods Strategy Tourism and Recreation Study Trails Study / Strategy Master Aging Plan	encourage active transportation Diversification of economy based on local and / or rural assets could reduce commuting time and encourage active transportation Encouragement of on-farm diversified uses could lead to active tourism opportunities Rural areas often have significant natural assets that are underutilized for leisure activities and active transportation, such as utility corridors, abandoned rail corridors.	 on the automobile (Haldimand County – Section 4.B). The County shall strive to create transit-supportive, compact urban form consisting of mixed land uses and efficient transportation networks (Norfolk County – Section 6.5(g)) An expansion to an Urban Area will be considered in the context of whether the proposed expansion will have a compact form, an appropriate mix of land uses, where practical and densities that efficiently use land, infrastructure, and public facilities, while providing for adequate parks and open space (Norfolk County – Section 3.4(f)) This Plan and local Official Plans shall promote new developments that involve a mix of housing types and densities that will contribute to an efficient utilization of land and services (Bruce County – Section 4.4.4.5f) The automobile will continue to be the main mode of transportation within the County due to its predominately rural character, small and dispersed population, Notwithstanding this, a land use pattern, density and mix of land uses shall be promoted in the Urban Area that reduces growth in the length and number of trips and creates the potential for public transit viable and other alternative modes such as walking and cycling (County of Norfolk – Section 8.2(g) New residential neighbourhoods shall be designed with a road pattern, streetscape, built form and mix of uses which supports and promotes walking and cycling (County of Haldimand – Section 4.B.2.12) Specific Diversity Policies County encourages preservation of unused railway rights-ofway for future use as transportation, utility or recreational corridors (County of Bruce – Section 4.6.1.vii) Linkages between the Downtown areas and recreational trails shall be encouraged to foster pedestrian activity and encourage tourism in the Downtown areas (County of Norfolk – Section 3.4.1(i)) Multiple use service corridors for major servicing infrastru

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
		facilities, parklands, public spaces, open spaces, trails and linkages, and, where practical, water based resources;	·		where appropriate and feasible, such as recreation (County of Haldimand – Section 5.D.5)
		Section 1.6.5 Public service facilities should be colocated in community hubs, where appropriate, to promote cost-effectiveness and facilitate service integration, access to transit and active transportation Section 1.6.7.3 As part of a multi-modal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including connections with cross jurisdictional boundaries.			 Specific Policies Promoting Diversity in Rural Areas Within an Agricultural designation permitted uses include: those which add value to farm produce. These may include such uses as processing, preserving, storing, and packaging of farm produce on farms; d) Outlets for the retail sale of local farm produce; e) Agricultural events (County of Norfolk – Section 4.2.1) Uses secondary and directly related to the principal use of the property may be permitted within Agricultural Areas (County of Bruce – Section 5.5.4.1)
		Section 1.6.7.4 A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.			
		Section 1.6.8.4 The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged where feasible			
		Section 1.7.1 Long-term economic prosperity should be supported by: f) Providing an efficient, cost effective, reliable multimodal transportation system that is integrated with adjacent systems g) Providing opportunities for sustainable tourism development; h) Providing opportunities to support local food and promoting the sustainability of agri-food and agri-product businesses by protecting			

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Premise Relevant 2014 PPS - Examples		Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
		agricultural resources and minimizing land use conflicts;			
		Section 1.8.1 Planning authorities shall support energy conservation and efficiency, improved air quality, reduce greenhouse gas emissions, and climate change adaptation through land use and development patterns which: a)promote compact form and structure of nodes and corridors; b) promote the use of active transportation and transit in and between residential, employment and institutional uses; e) improve the mix of employment and housing uses to shorten commute journeys and decrease transportation congestions;			
		Section 1.1.4.1 Healthy, integrated and viable rural areas should be supported by: a) building on rural character and leveraging rural			
		amenities and assets; b) promoting regeneration, including the redevelopment of brownfield sites; c) accommodating an appropriate range and mix of housing in rural settlement areas; d) encourage the conservation and redevelopment of existing rural housing stock on rural lands; e) using rural infrastructure and public service facilities efficiently; f) promoting diversification of the economic base and employment opportunities through goods and services, including value-added products and the sustainable management or use of resources;			
		g) providing opportunities for sustainable and diversified tourism, including leveraging			

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County	
		historical, cultural and natural assets; i) providing opportunities for economic activities in prime agricultural areas, in accordance with policy 2.3.				
		Section 2.3.3.1 In prime agricultural areas, permitted uses and activities are: agricultural uses, agriculturally related uses and on-farm diversified uses.				
Landscape and Street Design	 People may be more likely to walk or cycle (whether it be for leisure or utilitarian purposes) if one's community: a) Feels safe; b) Is interesting / pleasant to look at; c) Includes a variety of interesting places to go; and, d) Includes destinations that don't take long to get to. 	Section 1.5.1 Healthy, active communities should be promoted by: a) Planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity; b) Planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open spaces, trails and linkages, and, where practical, water based resources; c) Providing opportunities for public access to shorelines; and d) Recognizing provincial parks, conservation reserves and other protected areas Section 1.6.5 Public service facilities should be colocated in community hubs, where appropriate, to promote cost-effectiveness and facilitate service integration, access to transit and active transportation Section 1.6.7.3 As part of a multi-modal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including	Design Guidelines Community Improvement Plans Streetscape Plans Downtown / Mainstreet Master Plan	 Historical lot fabric often a challenge to streetscape improvements Rural Downtowns / Mainstreets are often intersections of County Roads or Provincial Highways. Road improvements involve multiple levels of government (local, County, Provincial) Community Improvement Plans for urban or rural areas may be based on Design Guidelines that reflect unique rural character and encourage economic / tourism opportunities Natural settings provide opportunity 	 General Landscape / Street Design Policies Urban design contributes to and guides: a) The revitalization of the commercial core; b) new commercial and industrial development; c) subdivision design; d) preservation of cultural heritage resources and scenic values; e) tree preservation; f) conservation of natural environments; g) location and design of arterial collector roads; h) compact and efficient urban areas; i) pedestrian walkways and bicycle paths' j) community integration; and k) aesthetics (County of Haldimand – Section 5.G.1) Excellence in community design is essential to creating physical environment where people have the appropriate places to interact, live, work, recreate and learn (County of Norfolk – Section 7.4) The County shall promote the improvement of the physical character, appearance and safety of streetscapes, civic spaces and parks (County of Norfolk – Section 7.4.b) Specific Landscape / Street Design Policies The County shall define style of street furnishings that should include shared and accessible bicycle racks, garbage receptacles, benches, and street lands to be used in new 	

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
		connections with cross jurisdictional boundaries. Section 1.6.7.4 A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation. Section 1.6.8.4 The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged where feasible Section 1.7.1 Long-term economic prosperity should be supported by: c) Maintaining and where possible, enhancing the vitality and viability of downtowns and mainstreets; d) Encouraging a sense of place, by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes;		for recreational facilities	development (County of Norfolk – Section 7.4.k) The County of Bruce or any lower tier municipality my regulate through Site Plan Control any matters relating to sustainable design elements on any adjoining highways under municipalities jurisdiction, including, without limiting trees, shrubs, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities provided that Guidelines addressing such issues have been adopted by the appropriate lower or upper tier Council (County of Bruce – Section 6.5.2) Sidewalks shall generally be required on one side of local roads. In instances where local roads lead directly to a school, park, community facility or other facility which generates pedestrian traffic, or where safety of pedestrians is of particular concern, sidewalks may be required on both sides of the road (County of Norfolk – Section 8.2.2.2c) A layout of the proposed plan of subdivision will have regard to matters of: Access to public transportation and trails, Connections to trails, Improving and promoting the walkability / cycleability within the proposed plan and with consideration for existing walking and cycling conditions, Accessibility for persons with disabilities Provision of sidewalks Street patterns of the proposed plan and how it fits with the surrounding neighbourhood. Plans which utilize a grid pattern or a modified grid pattern shall be considered more favourably than those with a curvy street pattern or cul-de-sacs, Energy conservation and efficiency design measures such as LEED or Low Impact Development, Impact on natural environment, Consideration of the design of street lighting to minimize impact on dark skies, Provision of usable parkland and green space, Public access to water front or beach (where applicable)

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
					 (Grey County – Section 6.12.1) Criteria for designating a Community Improvement Area in a Residential Area, may include a deficiency or deterioration in one or more of the municipal services or community facilities: public indoor / outdoor leisure and recreational facilities; and public open space and parkland (County of Haldimand – Section 8.I.1.4)
Access to Recreational Facilities	People may be more likely to be physically active if they live close to recreational facilities (whether natural or built) that are perceived to be safe, accessible and convenient	Section 1.5.1 Healthy, active communities should be promoted by: e) Planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity; f) Planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open spaces, trails and linkages, and, where practical, water based resources; g) Providing opportunities for public access to shorelines; and h) Recognizing provincial parks, conservation reserves and other protected areas Section 1.6.5 Public service facilities should be colocated in community hubs, where appropriate, to promote cost-effectiveness and facilitate service integration, access to transit and active transportation Section 1.6.7.3 As part of a multi-modal transportation system, connectivity within and among transportation systems and modes should be maintained and, where possible, improved including	Parks Recreation / Leisure Master Plans Utility Corridor Study Trails Master Plan	Providing access to recreational facilities (built or natural) — public or private important to encouraging physical activity	 General Access to Recreational Facilities Policies Bicycle and pedestrian trails and paths contribute to the health of communities. This Plan recognizes and supports cycling and walking as alternative modes of travel. The County encourages the development of enhanced pedestrian and shared use non-motorized trails and bicycle routes (County of Norfolk – Section 9.3) County Council encourages the development of recreational trails including hiking trails, canoe routes, the Bruce Trail, biking, skiing and snowmobile trailsCounty Council also encourages the local municipalities to permit trails throughout the rural area, without requiring an amendment to the Zoning By-law. (County of Bruce – Section 4.6.5.2) Where appropriate and feasible, the County will encourage the development of a pedestrian and non-motorized vehicular trail system to link open space and park areas within and adjacent to areas of development utilizing such features as existing creek and stream valleys, transportation corridors and other natural corridors. (County of Haldimand – Section 6.E.) Specific Access to Recreational Facilities Policies The County shall: Work towards providing bicycle and pedestrian paths, separated from the roadway on existing and proposed roads, on abandoned rail corridors, on utility corridors, and within parks and open spaces as appropriate. Consider adapting roads to provide safer travel for bicycles, where feasible and appropriate.

Table 5: Official Plan Policy Comparative Table

Principal	Premise	Relevant 2014 PPS - Examples	Foundational Studies - Examples	Rural Application	Official Plan Policy Examples taken from Haldimand, Norfolk, Grey, and Bruce County
		connections with cross jurisdictional boundaries. Section 1.6.7.4 A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation. Section 1.6.8.4 The preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics should be encouraged where feasible			 Encourage the integration of bicycle path and walkway systems into the design of transportation facilities by including facilities such as protected bicycle storage areas at stations, places of employment, and major community, institutional, educational, cultural and shopping locations where appropriate. Encourage the continued use and development of the multi-purpose trail system connecting Simcoe, Delhi, Waterford, and the City of Brantford as well as connections to the Trans Canada Trail. Work towards the development of a waterfront trail between Port Dover and Long Point. (County of Norfolk – Section 8.3a-f) County Council encourages, where feasible, the multiple use of utility corridors including rights-of-ways of roads and railroads including their use for recreational trails. (County of Bruce – Section 4.7.4.5) The County may require the dedication of land for park or other recreational purposes, including trail development, as a condition of approval of a plan of subdivision, plan of condominium, (County of Haldimand, Section 6.B.1a)

CHAPTER FIVE: DISCUSSION

The Planning Director of each municipality was interviewed to flesh out a more fulsome understanding of how the OP policies came to be, how successful they have been, what factors may be attributed to their success and what challenges the municipalities face in promoting physical activity. These interviews, while guided by a finite set a questions, were informally conducted, in that the conversation was allowed to flow based on the issues brought up by the interviewee.

These key themes discussed during the interviews have been summarized into the following categories:

Origin of Policies, Strength of Policies, Assets, Common Challenges, Trends, and Lessons Learned.

Origin of Policies

The County of Norfolk noted that a private planning consulting firm was hired to create the County's first Official Plan and that the progressive 'healthy community' policies largely reflect the experience and focus of this consulting firm, rather than a specific Council mandate to include such policies (McIntosh, J., 2013). Further, it was noted that 'Active Transportation' was brought to the Counties attention by way of the local Health Unit (Norfolk-Haldimand Health Unit) and it continues to be brought forward by way of staff relationships between the County and Health Unit (ibid).

In Haldimand, in contrast, the focus on 'healthy communities' at a policy level was driven by staff and couched in terms of providing an opportunity to increase 'community vibrancy' (Manley, C., 2013). The idea of 'community vibrancy' is based on the promotion of things that will enhance the County from an economic sustainability perspective. Healthy community policies, such as those that promote physical activity, are justified for their potential to generate economic opportunities. For instance, with respect to the Trails Master Plan, the trails of immediate focus are those that connect to surrounding

municipalities to grow potential tourist spin-offs (ibid). Interestingly, while such policies are justified at a political level based on potential economic opportunities, at a staff level, the policies are justified for their inherent positive health outcomes. This was a common juxtaposition found in all of the municipalities interviewed and will be discussed in the 'challenges' section below.

Both Grey and Bruce County attributed the long history of trail use and recreational pursuits in the area as creating a culture supportive of policies that further support physical activity (Laforest, C., 2013 and Scherzer, R. 2013). These Counties also benefit from a full four season recreational climate.

Grey County also credited the local Health Unit with recommending many of the progressive 'healthy community' OP policies during its previous five-year review. It is anticipated that further enhancements, as recommended by the Health Unit, will be included during the next OP five-year review (Scherzer, R. 2013).

Strength of Policy

Haldimand County noted that strong OP policies and consistent implementation by Council has been instrumental in setting the tone for development in the area, particularly for developers who are unfamiliar with progressive design patterns (Manley, C., 2013).

Haldimand, Norfork and Bruce County all indicated that no one policy in particular resulted in significant changes to local levels of physical activity. The County of Bruce stated that the benefit of having strong and clear policies ensured that staff and the community could understand the 'common goals' trying to be achieved (Laforest, C., 2013). However, both Norfolk and Bruce County suggested that on-the-ground initiatives should not always wait for the development of planning policies, as

community groups and developers can often respond to 'market demands' quickly while municipalities tend to rely on studies to identify and respond to needs within a formalized planning process that may take years (Laforest, C., 2013 and McIntosh, J., 2013).

Grey County partially attributed the County and Local OP trail policies to the growth of trail developments in their communities (Scherzer, R., 2013). Both Grey County and Haldimand County noted that many large land development corporations already understand the importance of incorporating recreational amenities (such as trails) into development plans. However, such amenities are new to some of the smaller and more local developers and, in these cases, OP policies are very important to the inclusion of such amenities into development plans (Scherzer, R., 2013 and Manley, R., 2013).

Assets

All of the municipalities noted that the natural environment provided ample opportunities for recreational pursuits in rural areas. Amenities largely unique to rural areas include: gravel roads; County forests; rehabilitated aggregate pits; abandoned rail corridors, and; agriculturally-related or onfarm diversified and agri-tourist businesses, such as wineries, orchards, and cheese makers, etc.

Further, one significant benefit associated with rural municipalities as identified by the County of Bruce is that the small population allows staff to interact with constituents on a more frequent and intimate basis. While not within a formal engagement process, this relationship often allows staff to understand the priorities and concerns of the public without having to undertake rigorous engagement processes for every planning initiative. This is not to say the public is not formally consulted, but that the consultation phase of projects may be relatively concise and targeted (Laforest, C., 2013).

Norfolk County identified, as a key recreational asset, the numerous rail corridors that have, in the past, been purchased by the municipality for trail purposes (McIntosh, J., 2013). While a number of corridors were not purchased, a sufficient number were acquired to provide for County wide north-east and south-west trail linkages to neighbouring municipalities. Although expensive at the time, it is now considered as a priceless investment that would otherwise be unachievable today. The Director noted that a single-tier municipal structure is particularly advantageous to purchases of rail corridors. If such purchases were attempted within a two-tier municipal structure, it would require agreements with multiple parties, making the process much more difficult (ibid). It's believed that most, if not all of the abandoned rail corridors in Norfolk County are either owned municipally or privately and attempts to acquire any of the privately owned linkages are not anticipated in the near future (ibib).

Grey County stated the Georgian Bay shoreline provides a unique natural setting to which many developments have been built around. The desire of new and existing residents to have access to area trails and recreational facilities is prompting the inclusion of additional trail linkages and amenities beyond what is being required by the municipality in order to satisfy market demand (Scherzer, R. 2013).

Budget constraints, while a challenge, have also led to new and positive relationships between the municipality, community groups and local agencies. Grey, Bruce and Norfolk County indicated that they benefit from a close relationship with their local Health Unit, in terms of access to resources, knowledge and funding for projects related to 'healthy communities'. In fact, Grey County noted that all municipalities concerned with 'healthy community initiatives' *must* become partners with their local Health Unit to tap into both knowledge and funding resources (Scherzer, R. 2013). The County of

Bruce advised of several partnerships between the municipality and local community groups to support and leverage funding for the operation and maintenance of recreational facilities (Laforest, C., 2013).

Common Challenges

All four of the municipalities noted funding as a particular challenge in implementing additional policies to promote physical activity.

Funding for planning projects is inherently political. Under the current <u>Municipal Act</u>, one of the few annual sources of funding municipalities have at their disposal is property assessment taxes. Municipalities with little or negative growth and a dispersed population over a large land base (as is common in most rural municipalities) face, at the same time, a consistent or growing list of servicing responsibilities as mandated by the Province.

As such, competition for funding is often fierce. Politicians tasked with doling out funding want to ensure that such projects: 1) meet multiple needs; 2) may be leverage-able, and; 3) are measurable (the results may be measured and accounted for) (Laforest, C., 2013 and Manley. C., 2013). These types of projects are politically advantageous in that they gain the most amount of public support. Therefore, in rural municipalities, special funding projects are often couched in ways that emphasize associated economic opportunities, are pragmatic in their approach (focused on results rather than high-level visioning exercises), and include within them mechanisms for measuring results. For example, trail use and the use of an indoor walking track is counted daily in Haldimand County and the counts are provided to Council to demonstrate that the projects are successful (Manley. C., 2013). Bruce County's approach to its Trails Strategy (discussed above) exemplifies a pragmatic and efficient use of funds

(Laforest, C., 2013). However, some of these projects are small and the results may not be seen for years, rather than months, which does not always align with political timeframes.

Another interesting consequence identified with this economically constrained environment in rural municipalities is that it may discourage risk taking or innovative by staff. It was suggested, that small budgets and small staff complements tend to make errors highly visible to politicians and the community. This visibility may discourage staff from making decisions that are 'outside of the box' (Laforest, C., 2013).

Another challenge discussed by all municipalities was the dispersed population and land area. This makes some infrastructure improvements, such as paved shoulders, very costly. Accordingly, such improvements must be strategically located (Scherzer, R., 2013). Further, this dispersed population sometimes makes it difficult to align municipal boundaries and projects to constituents' sense of place (McIntosh, J., 2013).

The County of Haldimand noted one challenge the Planning Department has faced in introducing innovative policies and practices has been some historical corporate / community relationship difficulties. Mistrust in public office and within the corporation in the past has led the municipality to embark on a new approach to providing public service, one based on a community engagement and partnership, collaboration, and trust (Manley, C., 2013). This approach includes the development of a planning communications department whose task it is to assist community groups access funding sources and providing proactive planning services. Building this relationship and gaining the trust of key community groups has assisted in growing community support for active transportation policies (ibid).

The last challenge identified by both Haldimand and Norfolk County is seasonal weather. Unlike Grey and Bruce County who have a four season climate conducive to outdoor recreation, Haldimand and Norfolk Counties depend on one season for outdoor recreation pursuits. The shoulder seasons are highly variable and winter unpredictable in southern Ontario. This makes the financial viability of outdoor recreational amenities and associated businesses highly dependent on the summer season.

Trends

As mentioned earlier, all of the municipalities interviewed noted an aging population and a low or negative population growth rate as one of the most significant challenges facing the municipality (Laforest, C., 2013, Manley, C., 2013, Scherzer, R., 2013 and McIntosh, J., 2013). Several municipalities mentioned an influx of newly retired people into their communities or rural areas and that these people are bringing with them a desire for an active living lifestyle (Laforest, C., 2013, and Manley, C., 2013).

In addition, many are witnessing or predicting changing recreational trends, such as a decrease in organized sports, an increase in more passive recreational pursuits, a continued predominance of golfing, and at the same time, predicting a future sharp with a sharp reduction in golfing, and an increase in resource based recreational pursuits, such as birding, walking, hiking, horse-back riding, and zip lining (Laforest, C., 2013, Manley, C., 2013, Scherzer, R., 2013 and McIntosh, J., 2013). Hunting was also noted as an important recreational pursuit in Bruce County (Laforest, C., 2013)

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Finally, the lifestyle choices of rural residents were identified as an important barrier to 'healthy communities' and the interviewees acknowledged several rising health issues, including, obesity, heart

disease, diabetes rates and mental health issues (Laforest, C., 2013, Manley, C., 2013 and Scherzer, R., 2013)

Lessons Learned

One of the clear messages received during the interviews was the importance of partnerships between the local municipality and outside agencies and community groups, particularly the Health Unit (Laforest, C., 2013, Manley, C., 2013, Scherzer, R., 2013 and McIntosh, J., 2013). Rural municipalities typically operate under a fiscally restrained environment and these partnerships can provide access to knowledge, personnel or financial resources that might otherwise be unavailable. An additional benefit of such partnerships is that it grows a sense of ownership and pride within the community, thereby making such projects more likely to succeed (Manley, C., 2013).

Several of the municipalities noted that in order to operate within a 'fiscally restrained environment' projects need to: 1) meet multiple needs; 2) be leverage-able, and; 3) be measurable (the results may be measured and accounted for) (Laforest, C., 2013 and Manley. C., 2013). While at a staff level, projects may be desirable because they will promote active living, they may be justified at a political level based on associated economic benefits.

While all of the municipalities acknowledged the importance of strong and clear policies promoting physical activity in their OP, many stated that the successful on-the-ground projects were not necessarily driven by OP policies, but rather community interest and staff partnerships (Laforest, C., 2013 and Manley, C., 2013). Some of these projects went ahead in the absence of OP policies and, in fact, led to the inclusion of policies in the OP (ibid).

When asked if the Provincial Plans impacted their promotion of physical activity in any way, none of the relevant Counties attributed changes to policies or approaches to the Provincial Plans.

Lastly, a final observation made during all of the interviews is the importance of internal staff cooperation and partnership in rural communities. Three of the four municipalities mentioned, over the
course of the interview, several projects that depended on inter-departmental co-operation (Laforest, C.,
2013, Scherzer, R., 2013 and Manley, C., 2013). In these cases, the Planning Department co-ordinated
or acted in partnership at various times with the Community Services Department, the Transportation
Department, the Parks and Recreation Departments, the Treasury Department, and the Corporate
Services Department. In fact, while many of the projects may have had their origin in the Planning
Department, they depended on other Departments for their implementation. For example, paving wider
shoulders during road reconstruction in accordance to an active transportation initiative requires:
identification of lands that would benefit from paved shoulders (as an outcome of a community survey
completed as part of an Active Transportation Master Plan or Trails Strategy commissioned by the
Planning Department), that transportation engineers be aware and on-board with the project, that the
corporate legal services address risk management issues, and, the project is co-ordinated with any other
scheduled infrastructure works, such as sewer and water reconstruction (Laforest, C., 2013).

CHAPTER SIX - CONCLUSION

This paper has identified some of the health challenges facing rural residents and described the unique ways the built environment may impact the health of people living in rural areas. It has further described the various planning processes that provide opportunities for health intervention that may not be widely understood by those outside the Planning profession. Finally, it has described the experience four rural Counties have had in promoting physical activity in their Official Plans.

While several Health Units and advocacy groups have recently created documents that suggest Official Plan policies for the promotion of active living in rural communities, these documents include only general policy suggestions and do not include a detailed analysis of opportunities to influence policy within the land use planning process, particularly in a rural context (Young, 2011, Middlesex-London Health Unit, 2013, Heart & Stroke Foundation, 2013, Simcoe Muskoka District Health Unit, 2010, Hastings and Prince Edward Counties Health Unit, 2012). This paper has attempted to address this deficiency.

In summary, a number of planning policies and approaches can target built environment features and may increase the physical activity of a rural municipality.

Recommended Approaches to Planning Projects and Policies:

- Given the fiscally restrained environment rural municipalities often work within, projects that
 will result in a concrete outcome, one that is measurable, meets multiple needs and may
 leverage additional funds are likely to receive wide support;
- Justify active living policies and approaches based on associated economic opportunities;

- Community members and politicians in rural municipalities should encourage leadership and risk taking from their County staff and community groups;
- Design Guideline documents are crucial to implementing community improvements (both in rural and urban areas) that enhance active living;
- Advocating the Province to grant authority to Upper-Tier municipalities to designate
 Community Improvement Areas and implement Community Improvement Plans will assist in creating consistent approach to community improvement and enable the application of CIP's to rural areas;
- Create Secondary Plans to guide new development and redevelopment to ensure the inclusion of pedestrian oriented amenities and design features;
- Promote a 'complete street' design approach to street construction and reconstruction projects;
- Specific policies that will encourage active living in rural communities include:
 - Development of a rural/urban alternative transit system in partnership with local community groups and private transit providers;
 - Reducing commuter dependence by way of promoting intensified land use within rural population centres;
 - o Increase range of housing types and forms in neighbourhoods in rural population centres;
 - o Increase access and connectivity to natural areas in rural and urban areas;
 - o Create multiple use recreation facilities in key rural population centres;
 - o Utilize existing utility corridors for trail purposes;
 - Utilize rail corridors for trail purposes and purchase, where possible, abandoned rail corridors;
 - o Permit recreational use of rehabilitated aggregate pits;
 - o Permit the taking of land for trail purposes as partial credit of required parkland dedication;

- o Relocate aggregate truck routes to increase pedestrian safety;
- o Reduce the creation of new non-farm lots in agricultural and rural areas;
- Promote value added, on-farm diversified and agri-tourist uses, particularly those along existing trails or cycling routes;
- o New subdivisions should have good connectivity with the existing street patterns;
- o Retrofit existing subdivisions with pedestrian trails and linkages;
- o New housing should be oriented such that it enables 'eyes on the street/park', and;
- o Pave road shoulders to connect existing trails and linkages between urban and rural areas.

Findings from this research project include the fact that each municipality is different and each has, within its jurisdiction, a number of unique assets and challenges that has influenced the way in which physical activity is approached. The four rural municipalities were also found to share some commonalities, including a limited access to resources (in terms of staff, knowledge and funding) and an abundance of natural resources. Further, three of the four municipalities considered the local Health Unit to be a key source of opportunity to enhance access to resources that would otherwise be unavailable. Towards this end, this paper has attempted to building a common understanding of the ways planning and health professionals could potentially intersect in the effort to promote community health initiatives thereby strengthening the combined effort of planning and health professionals in promoting physical activity in Rural Ontario.

Bibliography

American Planning Association (2010) Complete Streets: Best Policy and Implementation Practices. Accessed 08/09/12 https://www.planning.org/pas/quicknotes/pdf/QN5text.pdf

Barnidge, E.K., Radvanyi, C., Duggan, K., Motton, F., Wiggs, I., Baker, E., and R. C. Brownson (2013). <u>Understanding and Addressing Barriers to Implementation of Environmental and Policy Interventions to Support Physical Activity and Healthy Eating in Rural Communities</u>. Journal of Rural Health. 29:97-105

Bergeron, P. and S. Reyburn (2013) <u>The Impact of Built Environment on Physical Activity, Diet and Body Weight Summary</u>. Public Policy and Health, Institut National De Sante Publique du Quebec, Government of Quebec, Publication No. 1614

Besser, L.M., and Dannenberg, A.L. (2005) <u>Walking to public transit: Steps to help meet physical activity recommendations</u>. American Journal of Preventative Medicine. 29(4), 273-280

Bray, R., Vakil, C., and Elliott, D., (2005) Report on public health and urban sprawl in Ontario: A review of the pertinent literature. Environmental Health Committee, Ontario College of Family Physicians. Accessed: 15/05/12 www.ocfp.on.ca/docs/publications/urbansprawl.pdf

Brownson, R.C., Baker, E., Housemann, R. A., Brennan, L. K., and S. Bacak (2001) <u>Environmental and Policy Determinants of Physical Activity in the United States</u>. American Journal of Public Health 91(12)1995-2001

Brownson, R.C., Hoehner. C.M., Day, K., Forsynth, A., and J. Sallis (2009) <u>Measuring the Built Environment for Physical State of Science</u>. American Journal of Preventative Medicine 36(4S): S99-S123.e12

Bronwnson, R.C., Housemann, R.A., Brown, D., Jackson-Thompson, J., King, A., Malone, B., and J. Sallis (2000) <u>Promoting Physical Activity in Rural Communities: Walking Trail Access, Use, and Effects.</u> American Journal of Preventative Medicine. 18(3)235-241

Briggs, R., Choy.S., & G. Steuart (2001) Transportation Tomorrow Survey. Accessed 02/12/13.

Buliung, R., Mitra, R and G. Faulkner <u>Active school transportation in the Greater Toronto Area, Canada: An</u> exploration of trends in space and time (1986-2006) Preventative Medicine 48:507-512

Canadian Institute for Health Information (2006) Improving the health of Canadians: Promoting healthy weights. Canadian Population Health Initiative. Accessed 03/02/14 https://secure.cihi.ca/free_products/healthyweights06_e.pdf

Cakmak, S., (2007) Air Pollution: Uneven Distribution of Health Risks. In Health Policy Research Bulletin: People, Place and Health, Health Canada. Issue 14.

Carver, A., Timperio, A., Hesketh, K., and D. Crawford (2010) <u>Are children and adolescents less active if parents restrict their physical activity and active transport due to perceived risk?</u> Social Science and Medicine 70:1799-1805

Census Canada (2013) Population Counts, for Canada, provinces and territories, census divisions, population centre size groups and rural areas, 2011 Census. Accessed 20/01/2014. Available at www.12.statcan.ca/census-recensement/2011/dp-pd/htl-fst/pd-pl/Table-Tableau.cfm

Cleland, V. J., Ball, K., King, A.C., and D. Crawford (2012) <u>Do the Individual, Social, and Environmental Correlates of Physical Activity Differ Between Urban and Rural Women</u>. Environment and Behaviour 44(3)350-

Colley, R., Garriguet, D., Janseen, I., Craig, C., Clark, J. and M. Tremblay (2011) <u>Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey</u>. Statistics Canada Accessed 09/11/2013 Available at: http://www.statcan.gc.ca/pub/82-003-x/2011001/article/11396-eng.pdf

Craig, C., Brownson, R.C., Cragg, S.E., and A. L. Dunn (2002) <u>Exploring the Effects of the Environment on Physical Activity: A Study Examining Walking to Work</u>. American Journal of Preventative Medicine 23 (2S):36-43

Currant, A., Grant, I., Wood, M. E., (2006) <u>Indicators for Community Action:</u>. <u>Built Environment and Community Health</u>. Journal of Rural and Community Development. 59-74.

DeBono, N. 2012, 'This man's home really is his castle' London Free Press, Available at: http://www.lfpress.com/2012/09/16/this-mans-home-really-is-his-castle

DesMeules, M., and R. Pong (2006) <u>How Healthy are Rural Canadians: An Assessment of Their Health Status and Health Determinants</u>, A Component of the Initiative "Canada's Rural Communities: <u>Understanding Rural Health and its Determinants</u>", Canadian Population Health Initiative, Public Health Agency of Canada, Centre for Rural and Northern Health Research, Canadian Institute for Health Information.

Ding.D., Sallis, F.J., Kerr, J., Lee, S., and D. Rosenberg (2011) <u>Neighbourhood Environment and Physical Activity Among Youth: A Review</u> American Journal of Preventative Medicine 41(4):442-455

Drummond, D (2011) Therapy or Surgery? A Prescription for Canada's Health Care System C. D. Howe Institute Accessed 08/23/2012 http://www.cdhowe.org/pdf/Benefactors Lecture 2011.pdf

duPlessis, V., Beshiri, R., Bollman, R.D., Clemenson, H., (2001) Statistics Canada <u>Definitions of Rural, Rural</u> and Small Town Canada Analysis Bulletin, Vol 3, No. 3

Eberhardt, M.S., and E. Pamuk (2004) <u>The Importance of Place of Residence: Examining Health in Rural and Nonrural Areas</u>, American Journal of Public Health 94(10)1682-1686

Eid, J., Overman, H., Puga, D., and M. Turner (2007) Fat City: Questioning the Relationship Between Urban Sprawl and Obesity. Accessed 03/02/2014 http://diegopuga.org/papers/fatcity.pdf

Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., and S. Raundenbush (2003) <u>Relationship between urban</u> sprawl and physical activity, obesity and morbidity. American Journal of Health Promotion 18(1):47-57.

Forsyth, A., (2010) <u>Health Impact Assessment for Planners</u> Journal of Planning Literature Feb 2010 24: 231-245.

Foster, S., & Giles-Corti, B (2008). <u>The built environment, neighbourhood crime and constrained physical activity: An exploration of inconsistent findings</u>. Preventative Medicine, 47(3), 241-251.

Frank, L et al., (2004) Obesity Relationships with Community Design, Physical Activity and Time Spent in Cars. American Journal of Preventative Medicine. 27(2) 87-95.

Frank, L & P. Engelke (2006) <u>How Land Use and Transportation Systems Impact Public Health: A Literature Review Between Physical Activity and Built Form</u>. Accessed 07/10/2013 http://www.cdc.gov/nccdphp/dnpa/pdf/aces-workingpaper1.pdf Frankish et al., (1996) <u>Health Impact Assessment as a Tool for Population Health Promotion and Public Policy</u>. Institute of Health Promotion Research, University of British Columbia, Vancouver

Frost, S.S., Groins, R.T., Hunter, R.H., Hooker, S.P., Bryant, L.L., Kruger, J., and D. Pluto (2010) <u>Effects of the built environment on physical activity of adults living in rural settings</u>. American Journal of Health Promotion, 24(4) 267-283

Frumkin, H., Frank L, Jackson, R., (2004) <u>Urban Sprawl and Public Health: Designing, Planning and Building for Healthy Communities</u>. Washington DC: Island Press

Government of Canada (2006) <u>The Human Face of Mental Health and Mental Illness in Canada</u> Accessed 21/03/2014 http://www.phac-aspc.gc.ca/publicat/human-humain06/pdf/human-face-e.pdf

Gupta, S., and L. Scenzilet, (2007) <u>Defining, Measuring, and Analyzing Health and Place, in Health Policy Research Bullettin: People Place and Health, Health Canada, Issue 14 Accessed: 08/05/2012 www.hc-sc.gc.ca/sr-sr/pubs/hpr-rpms/bull/2007-people-place-gens-lieux/index-eng.php</u>

Hastings & Prince Edward Counties Health Unit (2012) <u>Building Complete and Sustainable Communities:</u> <u>Healthy Policies for Official Plan</u>. Accessed 04/01/2014 <u>http://www.pecounty.on.ca/pdf/HealthyPoliciesforOfficialPlans Final web 1.pdf</u>

Handy S., Boarnet M., Ewing R., Killingsworth R. (2002) <u>How the Built Environment Affects Physical Activity – Views from Urban Planning.</u> American Journal of Preventative Medicine. 23(2), 64-73

Hannon, L., Sawyer, P., R. Allman (2012) <u>The Influence of Community and Built Environment on Physical</u> Activity. Journal of Aging and Healthy 24(3) 384-406

Heath, G. W., Brownson, C. R., Jruger, J., Miles, R., Powel, K.E., Ramsey, L., and The Task Force on Community Preventive Services (2006) <u>The Effectiveness of Urban Design and Land Use and Transport Policies and Practices to Increase Physical Activity</u>. Journal of Physical Activity & Health 3(1)S55–S76

Heart & Stroke Foundation (2013), <u>Shaping Active Healthy Communities</u> available at http://www.heartandstroke.com/site/c.ikIQLcMWJtE/b.8045619/k.F840/Healthy_Communities.htm

Hobin, E., Leatherdale, S., Manske, S., Dubin, J., Elliott, S., and P. Veugelers (2013) <u>Are Environmental Influences on Physical Activity Distinct for Urban, Suburban and Rural Schools? A Multilevel Study Among Secondary School Students in Ontario Canada.</u> Journal of School Health. Vol 83(5) 357-367

Hodgson, K. (2011) <u>Comprehensive Planning for Public Health.</u> Results of the Planning and Community <u>Health Research Center Survey.</u> American Planning Association. March 2011. Accessed: 20/05/12 www.planning.org/research/publichealth/pdf/surveyreport.pdf

Katzmarzyk, P. (2011) <u>Economic costs associated with physical inactivity and obesity in Ontario</u>. Health and Fitness Journal of Ontario. Vol 4(4) Available: www.healthandfitnessjournalofcanada.com/index.php/html/article/view/112 Accessed: 12/08/12

Kelly, C.M., Hoehner, C. M., Baker, E.A., Brennan, L.A., Ramirez, B and R. Brownson (2006) <u>Promoting physical activity in communities: Approached for successful evaluation of programs and policies</u>. Evaluation and Program Planning 29 (2009) 280-292

King, W. C., Belle, S. H., Brach, J.S., Simkin-Silverman, L.R., Soska, T., and A. Kriska (2005) Objective

<u>Measures of Neighbourhood Environment and Physical Activity in Older Women.</u> American Journal Preventative Medicine (2005) 28(5)

Laforest, C. (2013) Director of Planning, Bruce County. Interview November 6th, 2013.

Lee C., Moudon A.V. (2004) Physical activity and environment research in the health field: Implications for urban and transportation planning practice and research. Journal of Planning Literature Vol 19(2) 147-181. Available: http://hmcrc.srph.tamhsc.edu/Literature/PhysicalActivity/PAEnvironmentResearch.pdf Accessed: 02/09/12

Lees, E., and Redman, A., A. Bertland (2012) <u>A Profile of Promising Practices in Canada and Abroad – Built Environment – Bringing Health to the Planning Table</u>. Healthy Living Issue Group of the Pan-Canadian Public Health Network Available at http://www.phac-aspc.gc.ca/publicat/2009/be-eb/index-eng.php accessed Jan 17th, 2014.

Librett, J., Yore, M.M., Schmid, T.L, and H. Kohl (2007) <u>Are self- reported physical activity levels associated</u> with perceived desirability of activity-friendly communities. Health and Place 13:767-773

Lim, K., M. Appl. Stat and L. Taylor (2004) <u>Factors associated with physical activity among older people – a population based study.</u> Preventative Medicine 40(2005) 33-40

Liu, J., Bennett, K., Harun, N., and J. Probst (2008) <u>Urban-Rural Differences in Overweight Status and Physical Activity Among US Children Aged 10-17</u>. The Journal of Rural Health 24(4) 407-415

McIntosh, J. Director, Planning. Norfolk County, Interview - November 8th, 2013.

Manley, C. (2013) Director, Planning. Haldimand County. Interview - November 8th, 2013.

Mecredy, G (2010) <u>Street Connectivity As a Determinant of Health in Canadian Youth</u>. Msc Thesis, Queen's University

Middlesex-London Health Unit (2013) <u>Linking Health and the Built Environment in Rural Settings: Evidence and Recommendations for Planning Healthy Communities in Middlesex County</u>. London, Ontario: Gilliiland, J. et all.

Ministerial Advisory Council on Rural Health (2002) <u>Rural Health in Rural Hands Strategic Directions for Rural, Remote, Northern and Aboriginal Communities</u>. (2002) Accessed: 15/04/2012 www.srpc.ca/PDF/rural_hands.pdf

MMAH (2013) Citizens' Guides to Land Use Planning Accessed 13/11/2013 http://www.mah.gov.on.ca/Page1760.aspx

Office of the Chief Coroner for Ontario (2012a) <u>Pedestrian Death Review</u>. Available at: http://www.mcscs.jus.gov.on.ca/english/DeathInvestigations/office_coroner/PublicationsandReports/PedestrianDeathReview/DI Pedestrian Death Review.html Accessed Oct 15, 2012

Office of the Chief Coroner for Ontario (2012b) <u>Cycling Death Review</u>. Available at: http://www.mcscs.jus.gov.on.ca/english/DeathInvestigations/office_coroner/PublicationsandReports/CyclingDea thReview/DI Cycling Death Review.html Accessed Oct 15, 2012

Parks, S. E., Housemann, R.A., and R.C. Brownson (2003) <u>Differential correlates of Physical activity in urban and rural adults of various socioeconomic backgrounds in the United States</u>. Journal of Epidemiology and

Community Health 57(1)29-35

Perrotta, Kim (2011) <u>Public Health and Land Use Planning: How Ten Public Health Units are Working to Create Healthy and Sustainable Communities.</u> Prepared for the Clean Air Partnership (CAP) and the Ontario Public Health Association (OPHA). April 2011.

Provincial Policy Statement, 2014. Ministry of Municipal Affairs and Housing, Queens Printer for Ontario. www.Ontario.caPPS

Public Health Agency of Canada (2012) <u>'What Makes Canadians Healthy or Unhealthy?</u>
Available at: www.phac-aspc.gc.ca/ph-sp/determinants/determinants-eng.php Accessed: 29/07/12

Public Health Agency of Canada (2011) Chronic Diseases and Injuries in Canada 31(1) 1-30

Ross CL, Dunning AE, (1997) <u>Land Use Transportation Interaction</u>: <u>An Examination of the 1995 NPTS Data.</u> <u>Atlanta: USDOT Federal Highway Administration</u> Available at: http://nhts.ornl.gov/1995/Doc/landuse3.pdf Accessed: 12/02/12

ROWPH (2004) <u>Rural Health Study in Waterloo Region</u>. Region of Waterloo Public Health. Available: http://chd.region.waterloo.on.ca/en/researchResourcesPublications/resources/RuralHealth_Study.pdf Accessed: 20/09/12

Rydin, Y., et al (2012) <u>Shaping Cities for Health: Complexity and the Planning of Urban Environments in the 21st Century</u>. The Lancet Available at: www.thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2960435-8/fulltext Accessed: 19/07/12

Saelens B, Sallis J, Frank L. 2003, <u>Environmental Correlates of walking and cycling: Findings from the transportation, urban design, and planning literature</u>. Annals of Behavioural Medicine 25(2): 80-91

Sallis, J. F., Bowles, H.R., et al (2009) <u>Neighbouring Environments and Physical Activity Among Adults in 11 Countries.</u> American Journal of Preventative Medicine 36(6): 484-490

Sandercock, G., Angus, C., and J. Barton (2010) <u>Physical activity of children living in different built</u> environments. Preventative Medicine 50 (2010) 193-198

Schasberger, M., Hussa, C., Polgar, M.R., McMonagle, J.A., Burke, S., and A.J. Gegaris (2009) <u>Promoting and Developing a Trail Network Across Suburban, Rural and Urban Communities</u>. American Journal of Preventative Medicine. 37(6S2):S336-S344

Scherzer, R. 2013. Director of Planning. Grey County. Interview - November 6th, 2013.

Schumilas, T. (2007) <u>Healthy Growth: Health and the Environment in Waterloo Region</u>. Region of Waterloo Public Health. Accessed: 12/05/2012 www.gardenparty.ca/files/www/HEALTHYGROWTH Report.pdf

Simcoe Muskoka District Health Unit (2010) <u>Healthy Community Design: Policy Statements for Official Plans.</u> Skoworodko, C. (2012) <u>Planning for Complete Streets: A comparative evaluation of three transportation master plans.</u> Queen's University.

Transport Canada (2009) <u>Canadian Motor vehicle Traffic Collision Statistics</u>, Available at: http://www.tc.gc.ca/eng/roadsafety/tp-tp3322-2009-1173.htm Accessed Oct 12, 2012

Troped, P., Tamura, K., Whitcomb, H.A., and F. Laden (2011) Perceived Built Environment and Physical

Activity in US Women by Sprawl and Region American. Journal of Preventative Medicine 41(5): 473-479

Tucson, E., and Dempster, B., (2007) <u>Linking Health and the Built Environment</u>: <u>An annotated bibliography of Canadian and other research</u>. Prepared for Civics Research Cooperative. On behalf of Ontario Healthy Communities Coalition and in support of the Healthy Communities and Built Environment Project. Accessed: 26/05/2012 www.ohcc-ccso.ca/en/webfm send/176

Turcotte, M. (2011) <u>Commuting to work: Results of the 2010 General Social Survey</u>, Statistics Canada. Available at: http://www.statcan.gc.ca/pub/11-008-x/2011002/article/11531-eng.pdf

Williams, M., and Wright, M., (2007) <u>The Impact of the Built Environment on the Health of the Population: A review of the review literature</u>. Simcoe Muskoka District the Health Unit.

Accessed: 12/05/2012 www.simcoemuskokahealth.org/HealthUnit/Library/../BHCintro.aspx

Young, P. (2011) <u>Supporting Active Transportation in the Official Plan: Policy Example</u>s. Healthy Living Niagara available at healthylivingniagara.com

Appendix 1

Official Plan Matrix Table

	Yes	No	Policy Sections Comments / Questions
Higher Order Goal / Visioning Statements			
Definitions relating to recreation			
Range of Recreational Uses related to Designations			
Mixed Land uses			
Urban Design Guidelines			
Growth Management			
Community Improvement Plans			
Transportation / Utility Corridor Policies			
Parkland Dedication			
Municipal Standards re: parks, bike lanes, sidewalks, street lighting - size and location			
Secondary Plans			
Foundational Master Plans			
Leisure / Recreation			
Transportation			
Active Transportation			
Servicing			
Infrastructure			
Trails			
Natural Features			
Intensification Incentives			
Strength of Language			
OP Approval Date			
Additional Policy Regime – Provincial Policy Documents			

APPENDIX 2

Interview Questions:

- 1. With respect to the list of OP policies provided earlier, have any policies been missed that you are aware of?
- 2. What, in your opinion, has been your most successful planning policy or policies that promote physical activity in the County?
 - a. What, in your opinion, is the reason for its success?
 - b. How did the policy come to be?
 - c. Do you anticipate that it will face challenges in the future, if so, what are they?
- 3. Are there additional unique and / or innovative approaches to the promotion of physical activity in the County, either directly or indirectly?
- 4. What, in your opinion, are the most important challenges facing your County's ability to promote physical activity?
- 5. What, in your opinion are key assets your County has in its effort to promote physical activity?
- 6. Are you aware of how and when the promotion of physical activity became important in the County (i.e. who was involved and how did it begin)?
- 7. Are you aware of special health issues facing your County and if so, does this health issue impact the Planning department in its role and function in any way?
- 8. Could you identify some of the significant policies, programs, projects either driven by the County or the result of a collaboration with the County (not those merely endorsed by the County) that assist directly or indirectly in the promotion of physical activity. This could also include CIP programs, urban design guidelines, secondary plans or other foundational plans, etc.