Collaboration between Public Health and Planning Professionals towards the Development of a Healthy Community Policy Framework: A Case Study of The Regional Municipality of Peel

A report submitted to the School of Urban and Regional Planning in conformity with the requirements for the degree of Master of Urban and Regional Planning

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LIST OF ACRONYMS

HAT .......................... An Evidence & Best Practices Based Review for The Development of a Health Assessment Tool
HBS .......................... Health Background Study
HDI ............................ Healthy Development Index
Locals .................. Local Area Municipalities
OP ....................... Official Plan
PHIOLD ................. Evaluating The Public Health Impacts Of Land Development Decisions In Peel
PPS ......................... Provincial Policy Statement
PTG ......................... Places to Grow Act
The Region ........ Regional Municipality of Peel
ROP ........................ Regional Official Plan
ROPA ..................... Regional Official Plan Amendment
EXECUTIVE SUMMARY

Introduction
Canadians today are facing an increased burden of chronic disease caused by poor nutrition and physical inactivity (HealthyCanada, 2012; World Health Organization, 2011), with potentially drastic effects on overall life expectancy (Dannenberg, Frumkin, & Jackson, 2011). According to the Statistics Canadian (2013), 52.3% of the Canadian population is overweight or obese, 6.3% have diabetes, and 17% have high blood pressure (Statistics Canada, 2013). However, these health conditions cannot be addressed by modern medicine alone. The ways in which we plan our communities can influence the way citizens lead their lives, healthy or not (Hodge & Gordon, 2008; HealthyCanada, 2012). Numerous researchers, along with the professional association, Canadian Institute of Planners, have been calling upon the need for governments to facilitate a sustained relationship between planners and public health professionals, to help establish healthy community policies and regional plans for Canadians (Canadian Institute of Planners, 2013). The expected benefit in collaboration between these fields is: the abstraction of transferable lessons between multi-sectors, developments of higher-level policies at The Regional level, and the improvement of legislation at the provincial level (Buckett, 2010; Canadian Institute of Planners, 2013; Dannenberg, Frumkin, & Jackson, 2011).

For the purpose of this report, collaboration is the amalgam of two or more organizations that are engaged in a form of joint efforts towards the improvement of shared objectives (HealthyCanada, 2012; Donahue, 2004). This study examined the current collaborative process between public health professionals and urban planners, aimed at improving and promoting healthy communities in Peel Region. This exploratory study was guided by the following two objectives:

1. To evaluate healthy community planning discourse in The Regional Municipality of Peel
2. To gather information on the collaborative process taking place in The Municipalit of Peel to achieve healthy community planning goals

Rationale
The information gathered in this report will help planners, public health professionals and researchers better understand how public health and urban planning professionals can effectively collaborate, through an in-depth examination of The Regional Municipality of Peel (Herein, The Regional Municipality of Peel will be referred to as ‘The Region’). However, time needs to lapse to comprehend whether the fruits of their collaboration efforts translate into improved community health outcomes or not.

The geographical study area of interest chosen is The Region, both in terms of geography and the governing body. Collaboration between public health and land use planning and development services has been ongoing internally since 2005, when a report was brought forward at council highlighting how the built environment impacts human health (Lees, Redman, & Berland, 2010). From that point onward, Peel Public Health continued to provide a proactive health perspective on regional plans, development applications, and advocates for healthy provincial policy (Public Health Agency of Canada, 2009).
Methods

This exploratory study was conducted using a case study approach, encompassing a review of three documents and four semi-structured interviews (Yin, 2009). A document review was conducted to analyze healthy built environment initiatives at The Region. The three reviewed documents were the ‘Peel Healthy Development Index 2009’ (HDI), ‘Evaluating the Public Health Impacts of Land Development Decisions in Peel 2009’ (PHIOLD), and ‘An Evidence & Best Practices Based Review for the Development of a Health Assessment Tool 2008’ (HAT). These reports were evaluated based on the extent to which they reflected efforts in The Region to foster collaboration, as well as on their coverage of nine characteristics of the built environment that are associated with health (Dannenberg, Frumkin, & Jackson, 2011). These 10 themes guided the content analysis procedures, and provided categories and key words that are pertinent to collaboration and healthy community planning. In addition to quantifying the level of coverage of these 10 themes, a latent content analysis was performed to examine what the author of the document(s) intended to say (Hay, 2010), which helped assess whether the reports are primarily information or action based. Finally, semi-structured interviews were conducted with four urban planning and public health professionals at The Region. All of the individuals have been engaged in collaboration between both respective fields and the aim was to capture firsthand information about their experiences. This provided insight into the strengths and weaknesses of the current process, as well as the extent to which the recommendations from the document review have been utilized in The Region.

Document Review Findings

The document review found that each of the three reports contains a significant amount of healthy community theories and practices in Ontario. The reports included: contemporary Canada and Ontario specific health statistics, built environment indicators on public health, and current healthy community assessment tools.

The first two reports – HAT and PHIOLD – were primarily research and evidence-based papers. The elements most frequently mentioned were walkability, transportation facilities, pedestrian infrastructure, and the natural environment. The HAT was primarily information based as its primary objective was to establish a foundation of literature. The PHIOLD was somewhat action based as its primary purpose was to build upon the HAT report and establish a set of objectives for the development of a healthy assessment community tool.

The third report, HDI, which was built upon the first two reports, provided an action for almost all the checklist elements. The HDI presented a strong commitment to the development of a framework for regional municipalities, in which to adopt a context-sensitive agenda that integrates health impact considerations into the development approval process. The primary purpose of this report was to utilize and expand upon the findings from the previous two reports to identify elements of the built environment for which to utilize as quantifiable elements in the HDI tool. This report also provided specific collaborative recommendations. As expected, the element that was stated the least was social capital as it is not a quantifiable built environment characteristic. Detailed policy recommendations promoting building setbacks, collaboration, density, and proximity to services, were frequently present.
Interview Findings
The interviews revealed that, at first, the collaborative relationship in The Region was not well received; some planners felt that public health was not well equipped to comment on development applications. However, all participants stated that they felt considerably more knowledgeable after they collaborated with the other profession and began to grasp their perspective on the matter. After speaking with each interview participant, it is quite evident that they avidly wanted to promote collaboration amongst the two departments, but also between land developers, other sectors of government, not-for-profit organizations, and residents alike, to achieve their health and sustainability goals. They felt that provincial policies were useful guiding documents for healthy community design and policies, but lacked the support and local guidance that regional and local area municipalities require. Participants were also supportive of The Region’s policies and stated that they remained supportive and enabling of healthy community design. Participants stated that The Region was on its way to being supportive and enabling of healthy community planning, or to the extent to which is in their control. The Region’s employees demonstrated a strong commitment to promoting public health and improving provincial, regional and local policies. This pledge was confirmed through the words and language that they used, and as well as the passion they displayed when speaking about this initiative.

Recommendations
The following recommendations were proposed as a result of this study:

1. Offer Opportunities for Continual Learning by Means of Employee Development
2. Operationalize Collaboration
3. Improve Accountability Measures
4. Funding Opportunities, Risk Management and Contingency Measures
5. Increase Public Awareness of Collaborative Efforts
6. Engage Community ‘Champions’ to Keep Programs Moving Forward
7. Consider the Continual Analysis and Evaluation of Current Policies and Programs
8. Continue to Lobby the Provincial Government with Appropriate Changes
9. Promote a Multi-Disciplinary Focus

In the forthcoming years, The Region will need to bring a critical eye and novel interventions in order to perfect and define their process. The Region, and other regional governments alike, will be addressing a great deal of questions about accountability, new strategies to development applications, changes in social and political dynamics, and fluctuations in community health (HealthyCanada, 2012). The Region, planners and health professionals alike, will continue to see the need for evidence-based evaluation tools, such as the one being reviewed in this paper. By applying current research, planners and health professionals will be able to assess impacts of different types of land-use scenarios on community
health. A joint public health and urban planning approach asks the right type of questions about the built environment and public health (HealthyCanada, 2012). Therefore when the two collaborate, they both bring a unique critical eye and are able to assess the situation more thoroughly. Collaboration can help with the selection of useful built-environment and health indicators to improve current monitoring programs and evaluate the efficiency of proposed programs, policies, and infrastructure, in order to advance legitimacy for joint efforts between public health and planning professionals.
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CHAPTER 1: INTRODUCTION

1.1 Connections between Health and the Built Environment

Canadians today are facing an increased burden of chronic disease caused by poor nutrition and physical inactivity (HealthyCanada, 2012; World Health Organization, 2011), with potentially drastic effects on overall life expectancy (Dannenberg, Frumkin, & Jackson, 2011). Conditions such as obesity and diabetes are among some of the most common health concerns in Canada, and are directly linked to diet and exercise (Dannenberg, Frumkin, & Jackson, 2011). According to recent statistics, 52.3% of the Canadian population (with Ontario’s statistics being very similar) is overweight or obese, 6.3% have diabetes, and 17% have high blood pressure (Statistics Canada, 2013). However, these complex health problems cannot be addressed by modern medicine alone, but rather require upstream intervention on a range of factors outside of health care services, including education, transportation, income, housing, and community planning (World Health Organization, 2011; Buckett, 2010). How local citizens interact with their community is reliant on the built environment, which can have an impact on health. The way the buildings, road networks, transportation systems, parks, and other built environment infrastructure are presented influence human behaviour. These indicators are influenced across multiple sectors and require action from multiple players from public health and planning, and from public and private sectors. Meaningful dialogue will need to take place across sectors to determine and develop a common ground for discussion about the health of our communities (Provincial Health Services Authority, 2009).

1.2 The Need for Collaboration between Planning and Public Health

The ways in which we plan our communities have profound impacts on the way citizens lead their lives (Hodge & Gordon, 2008; HealthyCanada, 2012). As such, the practice of healthy community planning is grounded in the interface of two distinct professions: urban planning and public health. Health researchers, along with the Canadian Institute of Planners, have been calling for the provincial and federal government to facilitate a sustained relationship between planning and public health professionals to help establish healthy community policies and plans for Canadians (Canadian Institute of Planners, 2013). The benefit to collaboration between these respective fields is (Buckett, 2010; Canadian Institute of Planners, 2013; Dannenberg, Frumkin, & Jackson, 2011):

• The abstraction of transferable lessons between multi-sectors, which can result in an increased knowledge base and improved project deliverables.

• The developments of higher-level policies at The Regional level, which can result in healthier community plans and policies.

• The improvement of legislation at the provincial level, which will support healthy community planning at the provincial level and therefore will set a standard and provide proper guidance to all regional governments.

Collaboration between these professions is essential to ensure that current planning practices improve community health and well-being. Building this partnership opens a wide array of opportunities such as: greater community awareness, shared resources, augmented ability to overcome obstacles, better
access to the community and constituents, and amplified opportunity for funding (Sullivan & Skelcher, 2002; National Collaboration Centre for Healthy Public Policy, 2010; PARTNER, 2011).

Though this push for collaboration may seem novel, a collective partnership originally arose between urban planning and public health in the late 19th century over issues of sanitation and poor housing reforms (Dannenberg, Frumkin, & Jackson, 2011). However, since the industrial revolution, professional urban planners and engineers have primarily dictated the contents of official plans and municipal policies, with little engagement of public health officials. This divergence, among other societal shifts and changing lifestyles, has been associated with increased prevalence of chronic disease, pedestrian injury, poor air quality, and above all, assumptions that land-use decisions had no effect on public health (Frumkin, 2004). Thus, researchers argue that there is urgent need to reunite urban planning and public health through shared objectives (Corburn, 2011; Morris, 2006).

The information gathered in this report will help planners, public health professionals and researchers better understand how public health and urban planning professionals can effectively collaborate, through an in-depth examination of The Regional Municipality of Peel (Herein, The Regional Municipality of Peel will be referred to as ‘The Region’). Using an exploratory approach, the goal of this report is to contribute to the body of literature on the determinants of successful collaboration between urban planning and public health.

1.3 Research Question / Objective
This study examined the current collaborative process between public health professionals and urban planners at the Regional level that is aimed at improving and promoting healthy communities in the Peel Region. This exploratory study was guided by the following two objectives:

1. To evaluate healthy community planning discourse in The Regional Municipality of Peel
2. To gather information on the collaborative process taking place in The Regional Municipality of Peel to achieve healthy community planning goals

The first research objective was addressed through a document review of three reports completed for Peel Region and was assessed based on a set of healthy built environment criteria (HealthyCanada, 2012; Hodge & Gordon, 2008; Ministry of Municipal Affairs and Housing, 2009; NSW Department of Health, 2009). The three documents were qualitatively and quantitatively evaluated based on their efforts to foster collaboration, as well as the following nine characteristics of the built environment that are associated with human health and well-being: proximity to services, walkability, land use mix, density, street connectivity, transportation facilities, pedestrian infrastructure, social capital, and environmental disparities. These nine characteristics were derived from an in-depth literature review, in which I synthesized a set of characteristics that were reoccurring and specified as vital elements to the built environment (HealthyCanada, 2012; Hodge & Gordon, 2008; Ministry of Municipal Affairs and Housing, 2009; NSW Department of Health, 2009). The second research objective was addressed through semi-structured interviews of urban planning and public health professionals employed at The Region. This report aims to facilitate a conversation about the strengths and areas for improvement in collaboration between urban planning and public health in general, and to offer insights regarding successes and
challenges with the collaborative process between the public health and land use planning and development services departments for The Region in particular.

1.4 Scope

1.4.1 Geography

The geographical study area of interest chosen is The Regional Municipality of Peel, both in terms of geography (See figure 1) and the governing body. Collaboration between public health and land use planning and development services has been ongoing internally since 2005, when a report was brought forward at council highlighting how the built environment impacts human health (Lees, Redman, & Berland, 2010). From that point onward, the Peel Health department continued to provide a proactive health perspective on regional plans, development applications, and advocates for healthy provincial policy (Public Health Agency of Canada, 2009).

Figure 1.1: Location of The Regional Municipality of Peel
Source: TRIEC

Peel Region is governed by a two-tier structure. The upper tier, or The Region, exercises certain authorities that require coordination across the entire region. For example the regional government will commonly provide core services such as public transit, health services, waste management, and police services. Although it may appear that the regional government may have more governing power as they are the ‘upper-tier’ municipality that is not the case and is important to keep in mind for this paper. The Region has a specific mandate and is very mindful of their jurisdiction over planning matters. The authority for planning in this municipal structure is typically divided between the upper and lower tier. For instance, local area municipalities have the approval authority for development applications, while The Region acts as a commenting agency. Therefore, the RMP cannot be too prescriptive and has to rely heavily on partnerships and collaboration to achieve broader goals with their local area municipalities (Makuch, Craik, & Leisk, 2004; Sancton, 2011).

The local government in The Region maintains their separate existence and is able to exercise authority over local issues (Sancton, 2011). The Region consists of three local area municipalities (Herein referred to as ‘The Locals’, as stated by interview participants): City of Mississauga, City of Brampton, and Town of Caledon. These Locals are large municipalities with planning departments that are equal to or larger, in employees, than The Regional government. Thus, there was an opportunity to study an Ontario region that is currently re-establishing historical connections between planners and public health.
1.4.2 Information sources

Data for the study was obtained from two primary sources. First, a document review was conducted to analyze current and past collaborative work that is being conducted between public health and urban planning professionals. The three documents reviewed were the ‘Peel Healthy Development Index’ 2009, ‘An Evidence & Best Practices Based Review for the Development of a Health Assessment Tool 2008’, and ‘Evaluating the Public Health Impacts of Land Development Decisions in Peel’ 2009. From these reports, key findings and recommendations were extracted and assessed.

The second information source was collected through semi-structured interviews with urban planning and public health professionals employed at The Region who have had experience collaborating with each other. Interviews assessed the extent to which the recommendations identified from the documents have been implemented, and to capture interviewees experiences of working collaboratively.

1.5 Report Outline

This report is divided into five chapters. Chapter 1, Introduction, offered a brief introduction to the topic, outlined the research question, and described the project scope. Chapter 2, Literature Review, discusses collaboration between public health and urban planning in terms of historical development, areas that have been researched, gaps in the research, health drawbacks, methods used, and sources of bias. Chapter 3, Methodology, presents the methods used to address the research questions presented in Chapter 1. Chapter 4, Analysis and Findings, summarizes the key findings from the document review and interviews. Finally, Chapter 5, Conclusion and Recommendations, will relate the findings from Chapter 4 and analysis from Chapter 2 and present a set of recommendations and conclusions for improving the collaborative process between public health and urban planning professionals.
CHAPTER 2: LITERATURE REVIEW

2.1 Relation between the Built Environment and Health
The interface between public health and planning emphasizes the relationship between health and the built environment (Evenson, Satinsky, Rodriguez, & Aytur, 2012). The status of public health in Canada can partly be impacted by the structure of the built environment, lifestyle choices, and genetics (National Collaboration Centre For Healthy Public Policy, 2010). The built environment can have an impact on human behaviour and health. It can affect: the way people travel and how safe it is, air quality, access to services and jobs, individuals levels of physical activity, and opportunity for recreation (City of Toronto, 2012; Toronto Public Health, 2012). For example, typical North American suburban developments are often only accessible by private automobile, lack sidewalks, and offer little access to employment and services. These environments are discouraging to physical activity and social interaction. On the contrary, contemporary denser mixed-used communities, such as Cornell in Markham or Mount Pleasant Village in Brampton, are conducive to physical activity by providing a mix of land-uses, sidewalks and pedestrian infrastructure, and adequate access to public transit (Corburn, 2011; HealthyCanada, 2012; Morris, 2006).

Today, the current Canadian health status is characterized by overweight and obesity in adults and many related health consequences, which has been identified as a public health issue in Ontario by the Chief Medical Officer of Health (Lawrence Frank & Company, 2009). According to the 2013 Statistics Canada Health Profile, 52.3 % of the population is overweight or obese, 6.3% has diabetes and 17.5% has high blood pressure. Furthermore, respiratory diseases cause 45.0% of deaths in Canada (per 100,000 populations (Statistics Canada, 2013). More specifically, the total medical costs, from diseases such as these and of physical inactivity in Canada, is $6.8 Billion dollars annually (Janssen, 2011).

Most literature states that to build a flourishing community, it needs to be equitable, liveable, and sustainable. Our communities should enhance opportunities for residents to live healthy lifestyles by supporting the environment, walkability, public health, different modes of travel, safety, social interaction, and a sense of cultural identity (Corburn, 2011; Regional Municipality of Peel , 2005; Roseland, 2012; Toronto Public Health,2012).

2.2 Recent Calls for Reconnecting Public Health and Planning
A community’s health is contingent on many locally-operating health determinants. As such, many influential health institutions, including the Heart and Stroke Foundation of Canada and the World Health Organization, distinguish the need for proper community planning that promotes, instead of hinders, public health (Valkoa, et al., 2011; World Health Organization, 2011). Health researchers have called for reconnecting planners and health professionals to effectively address the mental, social, ecological, and physical health implications of urban planning (Jackson, 2002; Johnson & Marko, 2007; Frank & Kavage, 2008). Municipal professionals, such as urban planners, public health officials, transportation professionals, and community housing professionals, as well are calling upon these professions to overcome institutional barriers, and to shape the built environment so that it enhances community well-being (Corburn, 2011; Jackson, 2002; Rollins School of Public Health, 2002; Urban Public Health Network, 2010; Evenson, Satinsky, Rodriguez, & Aytur, 2012).
In 2009, a Canada-wide initiative began which aimed to address concerns over the built environment and public health. Organizations including the Heart and Stroke Foundation, the Urban Public Health Network, the National Collaborating Centre for Healthy Public Policy, and the Canadian Institute of Planners, came together to form the Healthy Canada by Design initiative (HealthyCanada, 2012). Healthy Canada was provided funding from the Canadian Partnership Against Cancer’s ‘Coalitions Linking Active and Science for Prevention’ (CLASP) program. The aim of their work is to re-establish collaboration between public health and planning, by using current literature to develop tools that support policy makers, developers, planners, and public health professionals towards the promotion of healthy communities across Canada (HealthyCanada, 2012). Other regional and local partners on this project include Fraser Health, Toronto Public Health, Quebec Public Health, Region of Peel, Vancouver Costal Health, and Vancouver Island Health Authorities.

2.3 Historical Overview of Links between Public Health and Planning

Despite the fact that both sectors have common interests and goals, there has been little collaboration between the urban planning and public health professions in Canada over the past century, leading to inefficient service provision, policies, city planning, and ultimately poor population health (Coburn, 2004; Northridge & Sclar, 2003). Yet, the disconnect between public health and urban planning has not always been the case, as the two fields largely evolved together in the mid-19th century through combined efforts to address unsanitary living conditions (Frank & Kavage, 2008). Together, planners, engineers, and public health professionals collaborated to reduce disease and death caused by unsanitary water, living conditions, and rapid industrialization (Coburn, 2004; Corburn, 2011; Kotchtitzky, Frumkin, Rodriguez, & Dannenberg, 2006). Many planners of this era, including Frederick Law Olmstead, felt passionately about how the built environment, specifically in urban centres, influenced public health (Frank & Kavage, 2008, p. 214).

Unfortunately, as the 19th century came to a close, public health was driven by germ theory which shifted research from urban populations to detailed immunization plans, while urban planning began to shift away from its origins to focus more on development regulations and zoning. Initially, urban planning actions of this era were actually beneficial to population health, because they ensured that citizens could not reside within close proximity to noxious land uses. However, this style of planning also led to a single-use landscape where the ownership of a vehicle was necessary for day-to-day activities and transportation (Johnson & Marko, 2007). As both fields drifted further apart and became increasingly specialized, separate municipal bureaucracies also began to emerge to improve urban development systems, including public housing, water delivery infrastructure, roads and transportation, and public schools systems. This aided in the continued fragmentation and division of these professions, lessening the combined efforts toward health equity and community well-being (Corburn, 2011). Given contemporary health concerns, such as physical inactivity, housing and food insecurity, and disability, collaboration between urban planning and public health is exceedingly pertinent today, to improve population health and foster greater population health equity.

2.4 State of Collaboration Today

There is a growing body of literature about the relationship between the built environment and related
health outcomes, as outlined in the beginning of this chapter (Evenson, Satinsky, Rodriquez, & Aytur, 2012; Johnson & Marko, 2007; National Collaboration Centre For Healthy Public Policy, 2010). Aware of this relationship, planning and public health professionals within the City of Toronto, Regional Municipality of Peel, City of Ottawa, and the City of Montreal have begun to take action (Urban Public Health Network, 2010). However this collaborative relationship is currently not mandated by any provincial legislation or departmental structures. Those departments or individuals that are currently collaborating are doing so willingly and through a) provincial funding that they sought out themselves and b) from guidance from professional standards. Thus, the current challenge to collaboration in the municipal sector is that no current mandate or organization guidance exists for collaboration. More specifically planners and public health officials lack a ‘toolkit’ in which to guide their collaborative efforts towards improving the built environment (Urban Public Health Network, 2010). This change will require a range of governmental reforms, including developing new policies, collaborating with key stakeholders across multiple sectors, generating evidence-based research, public consultation, and implementation and monitoring program (Corburn, 2011; Blais, 2010; Northridge & Sclar, 2003).

2.4.1 The Need for Collaboration
Collaboration is the amalgam of two or more organizations that are engaged in a form of joint efforts towards the improvement of shared objectives (Buckett, 2010; Donahue, 2004). Scholars and professionals alike have articulated various benefits to collaboration between multi-sector professions, including (NSW Department of Health, 2009; HealthyCanada, 2012; Canadian Institute of Planners, 2012): the promotion of dialogue between multiple-sectors, changes in the shape of administrative logistics and relationship between actors, effectiveness and participation in government projects, insight from various departments, and the reduction in administrative costs, time and resources. Principally, “it is about learning to work across disciplines, to listen and learn, change the culture and work better and smarter” (Canadian Institute of Planners, 2012, p. 10).

In 2013, Healthy Communities: Legislative Comparison Survey report, 2013, was published by the Canadian Institute of Planners (CIP). This study was conducted to help planners better understand how to plan for healthy communities. More specifically the survey helped identify current healthy community planning tools and how to enhance current administrative frameworks for the public health and planning professions in Canada. The survey was completed by 19 CIP members from eight different provinces, in the public and private sector, and in both urban and rural contexts. According to the findings in this study, general responses indicated a desire for cross-sectoral development, suggesting that the integration of both respective fields could encourage and increase the effectiveness of healthy community design implementation. However, the survey findings also stated that “this close administrative connection between planning and health is not present in all regions of Ontario, resulting in varied depths of partnership and collaboration across the province” (Canadian Institute of Planners, 2013, p. 23).

2.4.2 Barriers to Collaboration
A major barrier to collaboration arising from the literature focuses on the need to establish a common language between both planners and public health professionals (Bergeron & Levesque, 2011; National Collaboration Centre For Healthy Public Policy, 2010). Public health and planning professionals cannot
adequately present to one another without a proper understanding of each other’s department’s framework and processing. More specifically, thoughtful consideration should be given to discipline-specific acronyms and terminology, which can be difficult to interpret (Corburn, 2011; Canadian Institute of Planners, 2013).

Another challenge to collaboration has been the compartmentalization of professionals in ways that limit opportunities for cross-pollination and sharing of resources. Currently, on the systems level, there is a need for more organizational and systemic collaborative initiatives. However, such an approach to collaboration will require shifts in bureaucratic functions, and requires a long-term vision and investment. This may include a mandated collaborative environment, which in government could take many years to overcome. Without a proper mandate, collaboration between these fields may be hindered by the following factors (Buckett, 2010): long term sustainability of the project; political and economic fluctuations that may supersede or postpone the initiative; continued willingness of all partners to collaborate; development of concrete principles and actions. In addition to this, increased specialization amongst professionals can further compartmentalization. As many professionals continue to specialize in their field it’s vital to recall a systems thinking framework. This approach utilizes a comprehensive method which focuses on relationships within a system, rather than on specific components (Rubenstein-Montano, Liebowitz, Buchwalter, McCaw, Newman, & Rebeck, 2001). Collaboration between public health and urban planning professionals offers the opportunity to leverage local policy and development at the Regional and local level and improve community health and well-being.

2.4.3 Professional Standards as Facilitators of Collaboration

In Ontario both registered professional planners and public health professionals are guided by ethical codes of conduct and a management framework. These codes and standards shape the ways in which these professionals practice. In Ontario, planners have to abide by a statement of values and by a code of practice. This statement of values is a foundation of guidance and inspiration for planners. Alongside the eight values, one particular value that planners must recognize is “to overcome or compensate for jurisdictional limitations” in which “CIP Members understand that their work has a potential impact on many jurisdictions and interests. They must therefore practice in a holistic manner, recognizing the need to overcome the limitations of administrative boundaries” (Ontario Professional Planners Institute, 2014, p. 1). For the purpose of this paper this is an important value for planners to uphold in the public sector as they encounter issues of compartmentalization and administrative concerns. Furthermore, public sector planners will need to work past these jurisdictional issues and collaborate with other professions in order to uphold their responsibility to their communities, the natural environment, and to future generations (Ontario Professional Planners Institute, 2014).

Public health professionals in Ontario have a set of organizational standards in which to improve their efficiency and excellence of programs and services. Public health professionals can utilize these standards to improve project outcomes, resources, leadership, and to encourage collaboration amongst peers and other professions to reach their goals. For the purpose of this paper, these standards focus on capacity, partnership, and collaboration. Capacity includes work structures, processes, development,
and knowledge systems. Collaboration and partnership discuss relationship building and fostering partnerships with community members, in addition to ways in which to establish positive environments for community health and well-being through citizen engagement (Ministry of Health and Long-Term Care, 2012). All of these professional standards are important to keep in mind when collaborating across departmental borders and when advancing collaborative relationships between public health and planning professionals in Ontario.

2.5 What is Intersectoral Collaboration and Does it Work?
Increasingly, academics, practitioners, and consultants alike have, at one point or another, worked jointly with professionals of different disciplinary backgrounds. Intersectoral collaboration involves working across departmental boundaries with a shared responsibility and vision, and can lead to greater efficiencies in the design and delivery of services and programs (Bowersox, Closs, & Stank, 2003). It can also lead to improved project outcomes that may not be attainable when working in isolation (Daugherty, et al., 2006). It can allow each respective party to utilize the others core competencies, otherwise known as resource sharing, which can strengthen the entire process (Sullivan & Skelcher, 2002).

Conventional understanding of collaboration is that all players should see improved benefits by working together (Daugherty, et al., 2006). One potential benefit of collaboration includes increased and efficient use of resources and improved information sharing. Another is that it can help achieve shared visions. For example, in the 1990s, General Motors (GM) was seeking novel ways to improve their business model. During this time, their decisions were made independently, as each manufacturing plant made their own judgments in isolation. GM realised that they needed to look beyond their organization and began to collaborate with CNF Inc (a global supply chain management company) to create a joint venture company. The two players agreed that there needed to be an overlap between the manufacturer and the logistics provider, which led to increased reliability and speed of the shipment of automobile parts to GM plants and dealers (Sullivan & Skelcher, 2002). Successful collaboration occurs when parties integrate resources, such as financial, human, and technical, which can result in an improved business model (Daugherty, et al., 2006; Bowersox, Closs, & Stank, 2003). Within the public sector, formerly rigid boundaries between departments, sectors, or tiers of government are becoming more permeable as key actors begin to explore novel techniques to service delivery (Sullivan & Skelcher, 2002). Although the public and private sector are governed much differently, there are still transferable lessons. GM, like many regional departments, had each of its offices working in isolation and making decisions independently from one another. Primarily, an overlap between departments, or a working relationship, can lead to increased reliability and speed of product outcome. This is important in the public sector for two reasons a) resources are limited and b) many departments are often working towards the same goals and objectives. Therefore, the usage of regional time, money, and resources will be utilized more efficiently.

Despite the potential benefits, attention has also been paid to the pitfalls or barriers of intersectoral collaboration. First, the need for multiple parties to work together to form a long-term vision or strategy for collaboration is often overlooked (Daugherty, et al., 2006). Second, adequate time is often not spent on defining terminology, standards, goals, and implementation procedures in the short and long term.
Third, there are often considerable operational, financial, and political hindrances to collaboration, such as high resource needs, slower progress toward final objectives, dominating players, and lack of trust (Sullivan & Skelcher, 2002). Therefore, successes and failures in collaboration should both be considered in order to learn from challenging situations and develop best practices.

2.6 Precedents
Currently some municipalities and public health organizations in Canada and the United States are collaborating to combat current concerns over the built environment and public health. The following Canadian examples are recognized by CLASP Healthy Canada By Design (HealthyCanada, 2012), which is an active partner with the Canadian Institute of Planners. The United States precedents were chosen as they were recognized by the American Planning Association for their efforts to improve community health and well-being through collaboration between public health and planning professionals.

2.6.1 Canada
Toronto Public Health (TPH) has spent most of their efforts on creating an evidence-based tool that can model health impacts on a variety of land-use and transportation developments (City of Toronto, 2012). They have also completed a study that documents the health outcomes for a variety of residential communities, such as automobile-oriented versus walkable communities. Finally, TPH has been exploring a health background study framework developed by The Regional Municipality of Peel, in hopes that they will one day adopt this process in Toronto (HealthyCanada, 2012).

Montreal Public Health (MPH) has developed an inventory and mapping system of all locally funded community-based grassroots organizations that are aimed at creating more active and walkable communities. MPH’s next phase will be to evaluate the pedestrian environments of two Montreal neighbourhoods. Furthermore, MPH is conducting interviews with individuals across the city including community groups, local health centres, and the municipality to better understand current built environment and health concerns and goals (HealthyCanada, 2012).

Finally, the British Columbia Urban Public Health Network (UPHN) Health Authority (which includes Vancouver Coast Health, Vancouver Island Health Authority, and Fraser Health Authority) is providing a year-long training program aimed at strengthening and expanding the knowledge capacity of the Health Authorities on land-use planning. This training will help public health professionals influence policies to promote healthy community planning (HealthyCanada, 2012).

2.6.2 United States
In 2004, the Ingham County Health Department (Michigan) published ‘Our Health Is in Our Hands’, which offered statistics on the health status of the county. This report noted that in 2002, physical inactivity resulted in health-care costs of $300 million in Ingham County and $8.9 billion in Michigan. The public health department has two goals related to collaboration with urban planning. The first is to increase public health through master planning at the local and regional level. The second is to focus all resources on communities that appear to be in greater need. Over the course of their work, they have also held workshops with planners for continual learning with funding from Michigan State University’s Land Policy program (Morris, 2006).
In 2004, Minnesota’s Hennepin County’s Public Health Leadership Team (PHLT) conducted a study of the relationship between the built environment and health. Through an interdepartmental workshop, they developed a report with recommendations for improving the built environment from a public health perspective, and utilized it to put forward recommendations for the 2006 budget cycle and beyond. PHLT also conducted workshops, surveys, and interviews with key stakeholders including the public and planning professionals. Finally, after the report was completed, PHLT hired a community design liaison for a two year term to liaise between the Community Works and Transit department and the Human Services and Public Health department (Morris, 2006).

Finally, in Delaware County, Ohio rapid population growth and urban sprawl led the Delaware General Health District (DGHD) to establish a working group which spearheaded a county wide environmental and health assessment. This working group became one of only 10 counties in the United States to test a tool called the Protocol for Assessing Community Excellence in Environmental Health developed by the National Association of County and City Health Officials (Center for Disease Control and Prevention, 2013). Their objectives were to evaluate local health and environmental conditions, identify populations at work, and establish priorities for future steps. They distributed an open-ended survey, and held focus groups with key stakeholders and the public (Morris, 2006).

2.7 Gaps in Knowledge about Collaboration between Planning and Public Health

Literature supporting collaboration falls within the healthy communities movement (HealthyCanada, 2012; Toronto Public Health, 2012; Blais, 2010; Roseland, 2012). Elements of a healthy community that are commonly mentioned are liveability, sustainability, effective public transit, good education, and close access to food and healthcare (Dunn, et al.; World Health Organization, 2003; Toronto Public Health, 2012). Yet, rarely does the literature offer useful metrics defining what constitutes ‘effective’, ‘good’, or ‘close’, or tools for evaluating a community’s performance on these elements. As well, much of the literature on healthy community planning tends to overlook social stratification and the difference in health equity between different populations and cultures (Rollins School of Public Health, 2002). Recognizing and planning with these health inequities in mind is critical to promoting population health equity across Canada.

The establishment of a common language in collaboration has been recognized as a critical feature of successful collaboration (Coburn, 2004; Northridge & Sclar, 2003) (Bergeron K., 2012). However, there is also little literature or discussion about the development of a common language between public health and planning professionals. Yet, despite the recognition of the importance of shared language, little is known about the extent to which these languages are being developed and utilized to facilitate joint initiatives between planning and public health.

Proponents of collaboration commonly understand healthy community planning to involve “creative vision, strategic decision-making and thoughtful implementation that respects the needs and challenges of all residents” (Toronto Public Health, 2012, p. 5). However, little is known about how we specifically go about achieving these aims through collaboration. Therefore, another gap in the literature is an overall understanding of what successful public health and urban planning collaboration looks like. This
knowledge gap is partly explained by the fact that collaboration between public health and planning is still quite novel, with many collaborative projects across Canada in their infancy. For instance, the British Columbia Provincial Health Services Authority has very recently created a toolkit for design between planning and public health. This toolkit brings together public health, design, and land-use planning professionals in order to improve their understanding of the built environments and the effects it can have on health (Healthy Built Environment Alliance, 2014). In Ontario, the Medical Officers for Health for Peel Region, Toronto, Hamilton, and Simcoe Muskoka collaborated on a report titled ‘Improving Health by Design in the Greater Toronto-Hamilton Area’. This report outlines concerns for health with relations to how planners design the built environment (Mowat, et al., 2014). An adequate place for further research would be to look at current examples of collaboration, analyze their processes, and assess their strengths and weaknesses. Therefore, further research is needed to assess present day examples in-depth in Canada.

Earlier research on the topic of collaboration has tended to rely on previously conducted surveys and in-depth policy analysis (Corburn, 2011; Evenson, Satinsky, Rodriquez, & Aytur, 2012; Johnson & Marko, 2007). The recent study by Bergeron (2012) involved semi-structured interviews with provincial government policy staff from five ministries, to capture their on the challenges on inter-ministry coordination and collaboration towards a province-wide active community plan (Bergeron K., 2012). Seemingly little research has involved in-depth interviews of planners and public health professionals that are directly engaged in healthy community planning initiatives at the local or regional level.

2.8 Conclusions
Based on the literature reviewed for this report, it is apparent that collaboration between public health and urban planning has the potential to improve the public health through an informed decision-making processes and more comprehensive approaches to planning. The question then remains, how does successful collaboration between public health and urban planning look and function, and how would you measure its success? The ultimate aim of this study is to promote understanding of collaborative efforts to foster community health and well-being in The Regional Municipality of Peel.
CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Approach
The aim of this research was to examine the current collaborative process between public health professionals and urban planners at The Regional level that is aimed at improving and promoting healthy communities in the Peel Region. This research was conducted using an in-depth case study design, encompassing a review of three documents and four semi-structured interviews.

The geographical study area of interest chosen is The Regional Municipality of Peel, both in terms of geography and the governing body. Collaboration between public health and land use planning and development services has been ongoing internally since 2005. In 2005, a report was brought forward at council highlighting how the built environment impacts human health, on which council took direct action (Lees, Redman, & Berland, 2010). From this point onward, the Peel Health department continued to provide a proactive health perspective on regional plans, development applications, and advocates for healthy provincial policy (Public Health Agency of Canada, 2009). Therefore there is an opportunity to study an Ontario region that is currently re-establishing historical connections between planners and public health.

Reports from Peel Region were reviewed and assessed (quantitatively and qualitatively) based on the extent to which they promote collaboration, as well as on their coverage of characteristics of the built environment that have known associations with human health. The report analyses were then used to formulate questions for key-informant interviews.

3.2 Document Review
A document review was conducted to analyze healthy built environment initiatives at The Region. The three documents that were reviewed were the ‘Peel Healthy Development Index 2009’, ‘Evaluating the Public Health Impacts of Land Development Decisions in Peel 2009’, and ‘An Evidence & Best Practices Based Review for the Development of a Health Assessment Tool 2008’. These reports were qualitatively and quantitatively evaluated based on their efforts to foster collaboration, as well as the following nine characteristics of the built environment that are associated with human health: proximity to services, walkability, land use mix, density, street connectivity, transportation facilities, pedestrian infrastructure, social capital, and environmental disparities (Dannenberg, Frumkin, & Jackson, 2011). These 10 themes guided the content analysis procedures, and provided categories and key words that were derived from current literature that is pertinent to collaboration and healthy community planning.
The three documents were first assessed based on whether or not each of the 10 themes above were mentioned or not. Next, the aforementioned themes were individually assessed based on their frequency in the report. Then, all of the themes were ranked based on the amount of times they appeared in the report. The rankings were categorized based on four levels of strength: not present, weak, somewhat present, and strongly present. A grouping system was then established based on the outcome of the variables found in the report. Based on the frequency of all the themes, an overall rank of all 10 themes from 1-10 (highest to lowest) was provided. In addition frequency proportions were also calculated with the total ranking of frequency. Key points were then extracted from each of the 10 stated themes and reflected upon. Finally this information helped summarize key strategies, reoccurring themes, and recommendations.

Following the quantitative analysis, the coded passages were analyzed qualitatively, using latent content analysis (Hay, 2010). This approach involves examining what the author(s) of the document(s) intended to say, through a focus on semantics (i.e., the study of the relationship between words and phrases). One could assess how a particular subject is portrayed or the context in which it is presented. For example the word ‘crash’ can have multiple meanings including a drop in the stock market, an automobile accident, or ocean waves hitting a shore. From the report, each of the 10 themes were evaluated, sentence by sentence, and assessed as: A) whether it is referenced as an important issue or B) whether it is referenced as important AND provided with a course of action (Jang-Hwan Lee, 2001). For example the sentence “walkability is a determinant of community health” would be categorized as ‘A’, whereas “walkability is a determinant of community health. Policy measures to improve walkability are addressed in the following paragraph” would be categorized as ‘B’. This categorization helped

Table 3.1 Key Words that were used for Each Theme

<table>
<thead>
<tr>
<th>Themes (Dichotomous variable)</th>
<th>Key word identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Partnership; Collabrate; Cooperation; Combination; Team work, Relationship; “to work with”; consultation; inter-departmental; inter-sectoral; co-ordination</td>
</tr>
<tr>
<td>Walkability</td>
<td>Pedestrian; Walking; Active transportation; Accessibility</td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>Connection; Sidewalks; Road Network</td>
</tr>
<tr>
<td>Social Capital</td>
<td>Socially Vibrant; Social network; sense of community</td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>Mixed-use Development; Functionally integrated; Zoning</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>Closeness; Proximity</td>
</tr>
<tr>
<td>Density</td>
<td>Intensification; Compactness</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transit; Transportation; Roads; Bus Shelter</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Path; Pedestrian; Amenities</td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>Environment; Pollution</td>
</tr>
</tbody>
</table>
assess whether the report is primarily information- or action-based. This method presented a means by which to learn about each report and was utilized to:

• Asses if the overall vision of each report aligned with its actions
• Understand the relationship between the three reports
• Comprehend the breadth of work being conducted at The Region

3.3 Key Informant Interviews
Semi-structured interviews were conducted with four urban planning and public health professionals at The Region. All of the individuals have been engaged in collaboration between both respective fields and the aim was to capture firsthand information about their experiences. This provided insight into the strengths and weaknesses of the current process, as well as the extent to which the recommendations from the document review have been utilized in The Region. Participants were interviewed in their professional capacity.

3.3.1 Sample & Recruitment
Interview participants consisted of urban planners and public health professionals from The Region who have had experience collaborating with the other field. Four individuals were interviewed; two from each respective department. A primary contact was established at The Region, and a list of potential interviewees was then established and contacted via email. The goal of this recruitment email (See Appendix A), which contained a letter of information and consent form (See Appendix B and C), was to introduce myself and the research study, to explain how I acquired their contact information and why I would like to interview them, to describe the interview process, and to schedule an in-person or telephone interview. Interviews did not proceed until the signed consent form was received.

3.3.2 Administration and Analysis
The four semi-structured interviews took place between the period of January 17th to the 22nd, lasting an average of 40 minutes in length. I arranged two in-person interviews on Friday January 17th with an hour break in between to leave time to make notes after the first interview. The third interview was conducted on Monday January 20nd, in person, and the final interview was conducted over the phone on January 22nd.

An interview guide was created to examine the collaborative process with which they have been involved (See Appendix A – E). Three interviews took place at The Region’s main offices and one was conducted over the telephone. After the interview was complete, the interview was immediately transcribed on the same day as the interview. Once all the interviews were transcribed, the interviewees were assigned an ID code to protect their confidentiality.

Analysis of the transcripts followed a stepwise process. First, the interview transcripts were reviewed, and initial impressions and reoccurring themes were noted. This involved highlighting or underlining key words and phrases. Second, each of the participant’s answers were compared for each question, and general patterns were documented. For example, all participants noted specific provincial and regional policies that were enabling, or preventative of healthy community planning and policies. One week
later, transcripts were reviewed to assess whether any information had been missed, and to ensure that the original underlying meaning that originally interpreted was correct (Hay, 2010).

### 3.3.3 Interview Questions

Two parallel interview guides were created: one for urban planners, and the other for public health professionals (See Appendix D and E). The objectives of the interviews were to find out what The Region is doing to implement key recommendations from the documents that were reviewed in phase 1; to gather information on the kinds of collaborative processes they have taken part in; to understand their views on the challenges and strengths of those processes; and to assess where they see the future of collaboration.

The questions were provided for all participants one week in advance to allow them time to prepare. With the consent of the participants, interviews were recorded by hand by the researcher. Immediately after the interview, I allowed for an hour break to build upon notes taken during the interview and address any questions that may have arisen during the interview.

### 3.3.4 Interview Analysis

After the interviews were completed and fully transcribed, transcripts were coded and provided random numerical identifiers for confidentiality purposes (i.e. 001,002,003,004). Once the transcripts were stripped of identifying information, common themes were extracted from each interviewee’s responses to each question (Berg, 2009). First, the transcripts were reviewed for common words or phrases. Then, the interview questions were used to generate content related to larger themes such as ‘general perceptions on collaboration’, ‘collaboration at peel’, and ‘perceptions of local and provincial policies’. This process was conducted on two separate occasions to generate a more comprehensive set of findings.

### 3.4 Ethics

As this research involved collecting data from human subjects, ethics approval was sought and granted by the School of Urban and Regional Planning Unit Research Ethics Board on October 23rd, 2013. Because interviewees were professional planners and public health employees providing their expert opinion on this topic, the research posed very low risk to participants, and thus did not warrant approval at Queen’s University’s General Research Ethics Board (See Appendix I)

### 3.5 Limitations And Challenges

Researcher bias may have been introduced over the course of this study, given her support for collaborative efforts between public health and urban planning professionals. To limit this bias, three major sources were drawn upon including the literature review, document review, and interviews. Second, the research was conducted on a municipality known for its cooperation and collaboration between these fields. This research would have benefited from another case study where collaboration is less well established to offer alternative findings. As such, the findings generated from this study may be region specific and may offer limited generalizability.

Nevertheless, there were many strengths of examining The Region in-depth. First, The Region is one of the few regional municipalities in Canada, and even North American to be collaborating to this extent.
They are novel in their practices and policies, and have been asked to speak at the Canadian Institute of Planners conference this year on their current practices. Their work is also supported by many registered professional planners in the private sector. Focusing on one regional government allowed me to study, in-depth, The Region’s process and learn about specific benefits, limitations, and programs that are currently underway.
CHAPTER 4: ANALYSIS AND FINDINGS

4.1 Chapter Overview
This chapter presents findings from the document reviews and interviews. First, a checklist was employed which supported an unbiased method when examining the three reports. The three documents that were reviewed were the ‘An Evidence & Best Practices Based Review for the Development of a Health Assessment Tool 2008’ (HAT), ‘Evaluating the Public Health Impacts of Land Development Decisions in Peel 2009’ (PHIOLD), and the ‘Peel Healthy Development Index 2009’ (HDI). This evaluation revealed that all the reports encompassed a significant amount of healthy community concepts, however only the latter two reports addressed collaboration between both respective fields. Next, through a critical lens, the documents were evaluated to determine whether the healthy community elements they present were information-based or action-based (Hay, 2010), revealing that the first report was primarily information based (consistent with its intent), the second was somewhat action based (consistent with its intent), and the final report was primarily action-based (consistent with its intent). Finally, the interviews with The Region urban planning and public health officials generated similar findings as the document reviews, and were consistent with the current literature on this topic. Participants spoke openly about their current collaborative initiatives, and about their current regional policy plans and revealed that they were methodically implementing recommendations from the reports.

4.2 Document Review Findings

4.2.1 Background on the Three Reports
Collaboration between public health and land use planning and development services has been ongoing internally since 2005, when a report was brought forward at council highlighting how the built environment impacts human health (Lees, Redman, & Berland, 2010). This report encouraged council to adopt Resolution 2005-1395 which directed that Peel Public Health work with the Planning and Community Services departments for the Local Area Municipalities (Locals). From that point onward, Peel Public Health has provided a hands-on and progressive health perspective on regional plans and development applications, while advocating for healthy provincial policy. This council decision was what led to the creation of the first report.

The purpose of the HAT report, 2008, was for it to be the first phase in the development of an evidence-based planning tool for The Region, which would ultimately be used to quantify land development impacts on health. Thus, the chief goal for the HAT report was to provide the foundational research upon which this tool would base its assessments. While the focus in this report is on the built environment and its impacts on public health, emphasis is also placed on transportation choices that result from land development patterns. The report recommends that funding be provided to develop two evidence-based planning tools that can assist in systematically identifying direction and relative magnitude of potential public health impacts of different development proposals. These tools must be applicable in two primary contexts a) block plan level review and b) single/ smaller projects or for screening purposes. The report concludes by recommending the development of a detailed health
assessment model to assess various urban forms across a variety of development proposals, and a simpler checklist for the rapid assessment of individual development applications.

The PHIOLD report was the second step at The Region in creating a neutral evidence-based assessment tool (Lawrence Frank & Company, 2009). The purpose of this report was to help in the creation of a tool for development review, and build upon the previous HAT report with supplementary detail. The PHIOLD report proposes a tool to evaluate numerous health related effects of conservative and unconventional approaches to development at Block and Secondary Plan stages, thus creating one evaluative tool that systemizes the process and reduces biased analyses or interpretations. It also advocates for a common method that can be utilized by both the public health and planning department. The report also recommends that a tool be developed to evaluate single developments, that builds upon an established modeling platform known as I-PLACE3S. Furthermore to the two aforementioned tools, the report also endorses the continual development of policies which are supportive of health and physical activity.

The aforementioned reports provided the research foundation and justification for the development of the HDI. In 2009, The Region’s public health and planning departments collaborated with researchers at the Centre for Research on Inner City Health at St. Michael’s Hospital in Toronto and McMaster University in Hamilton to produce the HDI. The purpose of the HDI report is to draw form the findings from the previous two reports to identify elements (e.g., density) of the built environment for which to utilize as a quantifiable elements in tool. The HDI tool is evidence based and quantitative in nature, and can be used to measure health impacts associated with planning policy and development proposals. The HDI recognizes seven built environment elements that are associated with community health and well-being which are as follows: density, service to proximity, land use mix, street connectivity, road network and sidewalk characteristic, parking, and aesthetics and human scale. The elements in the tool are the main requirements in which credit development targets are provided for the applicant. Credits will be provided depending on the extent to which public health is promoted. For example, the more inclusive or walkable your development is, the more credits you would receive. It is worth noting that the creators of the HDI sought guidance on the quantifiable targets, ranges, and credit system from the Leadership in Energy and Environmental Design (LEED) for Neighbourhood Development (ND) Rating System, and as such, the HDI tool closely resembles LEED-ND.

The final results from the HDI report state that the feasibility of achieving the HDI standards within The Region’s three Locals may vary. It recognizes that the development of ‘one tool’ for application to all development types in The Region may not be suitable, and that the tool must be adaptable to different development types. The report also recognizes that developers are constrained by the built environment, as well as regional and provincial standards that are beyond their control. To help alleviate the constraints for developers a list of recommendations are suggested in order to support implementation of the proposed HDI tool.

4.2.2 Quantitative Document Review Findings
A quantitative approach was utilized to quantify the report results and understand how prevalent the 10 elements were in each report. A comparative summary (table 4.1) of the three reports are listed below,
which highlight the 10 key themes, their total rankings from highest to lowest and their frequency proportions. More complete details from the quantitative analysis can be found in Appendix F-H.

Analysis of the HAT report revealed two major themes (See Appendix F). First, there was little to no mention of collaboration between public health and planning professionals toward improving the built environment. And second, there was a high prevalence of passages related to the walkability theme. Transportation facilities were the second most common theme, while collaboration and social capital was the least common. For the PHIOLD report (See Appendix G), the distribution of the themes was generally evenly dispersed with the exception of social capital (low) and walkability (high). In contrast to the HAT report, PHIOLD made greater reference to collaboration between the two fields. Finally the HDI placed less emphasis on social capital and environmental disparities, and greater emphasis on land-use mix and density. All these findings are consistent with each of the report’s overall purposes, which are wholly about built environment elements on public health.
Table 4.1 A Quantitative Comparative Summary of the Three Reports

<table>
<thead>
<tr>
<th>Themes</th>
<th>Total (n=726)</th>
<th>PHIOLD (n=430)</th>
<th>HDI (n=761)</th>
<th>Total (n=1917)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Frequency</td>
<td>Total</td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td>Ranking of</td>
<td>Proportions (%)</td>
<td>Ranking of</td>
<td>Proportions (%)</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>(%)</td>
<td>Frequency</td>
<td>(%)</td>
</tr>
<tr>
<td>Walkability</td>
<td>1</td>
<td>32.8</td>
<td>1</td>
<td>22.4</td>
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<tr>
<td>Density</td>
<td>4</td>
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<td>3</td>
<td>14.6</td>
</tr>
<tr>
<td>Transportation Facilities</td>
<td>2</td>
<td>17.2</td>
<td>2</td>
<td>17.3</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>3</td>
<td>14.4</td>
<td>5</td>
<td>8.8</td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>5</td>
<td>7.8</td>
<td>7</td>
<td>7.9</td>
</tr>
<tr>
<td>Land-Use Mix</td>
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<td>2.6</td>
<td>9</td>
<td>2.4</td>
</tr>
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<td>Environmental Disparities</td>
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<td>10</td>
<td>0.5</td>
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<td>7.3</td>
<td>4</td>
<td>9.8</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10</td>
<td>0</td>
<td>6</td>
<td>8.9</td>
</tr>
<tr>
<td>Social Capital</td>
<td>9</td>
<td>1.2</td>
<td>10</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>
4.2.3 Qualitative Document Review Findings

HAT Report Findings

The primary focus of this report is on the need for objectively measured data in regional practices. The report is entirely information based as its main function was to establish a base of literature for future tool development on built environment elements (Table 4.2). Though the report does not address specific actions for each of the 10 themes the report does suggest the creation of two tools that can quantify health impacts of land development proposals in The Region. It is noteworthy that although the report was created through a collaborative process, there is little to no mention of collaboration between public health and planning as a key strategy to ensuring that health considerations are integrated into development applications. The report occasionally addresses public health professionals, however merely as a consultant group for The Regional planning department. Thus, this report does not accurately reflect the strong, and substantive, role that the public health department plays in The Region’s current endeavours.

Table 4.2 Key Statements or Recommendations in the HAT Report

<table>
<thead>
<tr>
<th>Themes (Dichotomous variable)</th>
<th>Key statement or Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkability</td>
<td>“When measuring walking distances, it is important to measure what is actually walkable on the street network as opposed to using the cruder ‘cry flow’ buffer measurement; and to account for major barriers to pedestrian movement such as highways.” p. 27</td>
</tr>
<tr>
<td>Collaboration</td>
<td>“Public Health Staff comment on development applications that come to The Region of Peel.” p. 68</td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>“Measure the number of intersections per acre” and “exclude intersections that actually represent barriers – that is, roads that dead end at a highway or highway interchanges.” p. 28</td>
</tr>
<tr>
<td>Social Capital</td>
<td>“A cohesive community can help increase personal security and allow people (particularly vulnerable residents such as seniors and people with disabilities) more opportunities to walk and participate in social activities” and “planners should strive to incorporate positive characteristic of the suburbs.” p. 54</td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>“A tool that measures land use patterns at the parcel or small grid-cell level is preferred.” p. 27</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>“For physical activity it is important to assess how a project or a plan provides access to parks, trails, recreational facilities and transit.” p. 27</td>
</tr>
<tr>
<td>Density</td>
<td>“Density measures should be measures of net density (the number of residential units per acre of land in residential use), rather than gross density.” p. 28</td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>“Measuring distances to/front transit routes/stations can be done by hand in small areas” (if not already in GIS). p. 28</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>“Measure the presence of sidewalks” (use GIS data if available). p. 29</td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>Referred to provincial and federal regulations that protect the public from unhealthy levels of exposure and hazards from air pollution. For example, the prohibition on the “development of a school, hospital, food establishment or residence within 450 metres of working face of the landfill, or within 300 metres of the disposal area of an operating or non-operating landfill.” p. 44</td>
</tr>
</tbody>
</table>
**PHIOLD Report Findings**

This report built upon the recommendations of the HAT report and is primarily action based (Table 4.3). Its main function was to build upon the previous report and help establish a set of tools that could be utilized in The Region to assess future built environment and development implications. The actions articulated in this report, however, are broad in concept, and provide little The Region-specific detail. Similarly, this report offers policy recommendations without specific details. Although there was still no specific reference on a policy recommendation regarding collaboration between public health and planning professionals, the language was much more conducive to collaboration (Table 4.3). For instance, the report referenced a tool that could be utilized by both public health and planning professionals, and emphasized public health and planning professionals to working together to improve the current health status of The Region. The lack of specific policy recommendations in this report and the HAT report for collaboration between both fields could be in part due to the fact that council had already directed both fields to collaborate, therefore making the assumption that advocacy for collaboration was not necessary.

**Table 4.3 Key Statements or Recommendations in the PHIOLD Report**

<table>
<thead>
<tr>
<th>Themes (Dichotomous variable)</th>
<th>Key statement or Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkability</td>
<td>“Invest aggressively in pedestrian bicycle and transit infrastructure.” p. 7</td>
</tr>
<tr>
<td>Collaboration</td>
<td>The creation of one tool that has one method “that can be used by both planners and health practitioners.” p. 55</td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>Street “connectivity determines how directly one can travel between activities on the street or path network.” p. 14</td>
</tr>
<tr>
<td>Social Capital</td>
<td>“Prioritize social inclusion and affordability.” p. 74</td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>“Encourage compact, mixed use development.” p. 74</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>“Encourage healthy food sources in close-in and low-income areas.” p. 74</td>
</tr>
<tr>
<td>Density</td>
<td>“Encourage compact, mixed use development.” p. 74</td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>“Coordinate development with existing or planned transit.” p. 74</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>“Invest in parks, trails and other recreational facilities.” p. 74</td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>“Encourage close in, infill and brownfield development” and “Limit greenfield development” and “Avoid locating sensitive land uses near sources of air pollution or noise.” p. 74</td>
</tr>
</tbody>
</table>

**HDI Report Findings**

The HDI report was primarily action based as provided the framework to establish a tool and enact measurements and directives to assess future development impacts in The Region (Table 4.4). While the HDI may be a useful tool, The Region’s Official Plan (OP) states that a health assessment ‘may’ be required (Regional Municipality of Peel, 2013). As such, the final score, or credit, from the HDI tool is
simply another piece of information that the Locals can take into consideration when deciding whether or not to proceed with a development. However, if the development was approved, and was then appealed at the Ontario Municipal Board (OMB), the score can be used as quantifiable and objective piece of information. Therefore, the lack of universality means that each area municipality may offer its own challenges when applying the HDI tool and targets.

This report, as well as the two aforementioned reports, was also unclear about how they would systemically go about selecting which development type or developer would be required to complete the health assessment. Despite its weaknesses, the HDI report was a strong guiding document that was supported by the two previous research reports. Its attention to The Region, the creation of specific Region guidelines, and ability to refer to existing and policies gaps at The Regional and local level was what transformed the HDI from a research report into a tool for The Region.
<table>
<thead>
<tr>
<th>Themes (Dichotomous variable)</th>
<th>Key statement or Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkability</td>
<td>“Maximum setbacks ≤ 7.6m for detached and semi-detached residential structures” and “Setbacks ≤ 4.6m for attached and multifamily residential structures” and “Setbacks ≤ 3m for commercial and light industrial structures” and “≥ 70% of front facades and main entrances of commercial/mixed use are flush with sidewalk” and “Main entrances of residential, commercial, and light industrial cannot front onto parking lots.” p. 47</td>
</tr>
<tr>
<td>Collaboration</td>
<td>“Prioritize overall public health in both transportation and urban planning” and “Initiate a collaborative approach between regional and municipal transportation planning, public health and planning departments” and “Develop a comprehensive, collaborative approach that addresses multiple needs” p. 75</td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>“Intersection density: 75 intersections/km²” and “Block Size: Max block size 1.5ha” p. 35</td>
</tr>
<tr>
<td>Social Capital</td>
<td>“Build a sense of community.” P. 180</td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>“≥ 5% of total community land is outdoor public space” and “Community provides ≥ 4 new services to an existing neighbourhood (within 1km radius of the community centre)” and “There is a mix of 3 housing types, 6 different services, a public school and a park ≥ 0.4/ha within 800m of the community centre.” p. 111</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>“Proximity to Services: at least 75% of residential units must be within ≤ 800m of ≥ 5 neighbourhood public services and ≥ 7 neighbourhood retail services” and “Proximity to Employment: Centre of primarily residential communities must be within ≤ 800m of the same number of full-time jobs as 50% of the number of dwelling units. Centre of primarily non-residential communities must be within ≤ 800m of the same number of dwelling units as 50% of the number of full-time jobs.” p. 44</td>
</tr>
<tr>
<td>Density</td>
<td>“Minimum Residential Density of 35 dwelling units/ha” and “Minimum Commercial &amp; Mixed-use density 0.7 FSI/FAR.” p. 26</td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>“Complete Streets: All new local roads ≤ 40km/h” and “All new non-local roads ≤ 50km/h” and “Recommendation to eliminate minimum parking requirements” p. 46</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>“well-connected, relatively compact, grid-like network of streets and pedestrian paths, which offer a variety of efficient walkable routes between destinations” p. 34 <strong>Included in the “road network and sidewalk characteristic element in the HDI</strong></td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>“Consider green spaces and parks within the Street Connectivity requirements.” p. 76 <strong>Environmental elements were also incorporated into other elements in the HDI</strong></td>
</tr>
</tbody>
</table>

*These requirements are simply a development evaluation tool. Unless municipal standards are the same, the developer does not need to abide to the guidelines unless the Local’s requires it.*
4.2.4 Linking Quantitative and Qualitative Findings

Findings from the quantitative and qualitative components of the document analysis were useful complements to one another. Specifically, the qualitative component was conducted to further assess and make meaning from the quantitative findings. Overall the findings from this section were reasonable and reflective of each of the report’s overall objectives.

The findings from the quantitative section highlighted that measurable built form elements were the primary focus, while soft elements, such as social capital, were not. As the primary functions of the reports were to develop a tool for land development impacts and development review, the findings were consistent with the purpose of the reports.

Consistent with each report’s purpose, the findings from the qualitative analysis highlighted that the HAT report was primarily information-based, while both the PHIOLD and HDI reports were action-based (Table 4.5).

Table 4.5 A Qualitative Comparison of the Three Reports Based On Whether They Were Information Based (I) Or Action Based (A)

<table>
<thead>
<tr>
<th>Themes</th>
<th>HAT</th>
<th>PHIOLD</th>
<th>HDI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>A</td>
<td>I</td>
</tr>
<tr>
<td>Walkability</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Collaboration</td>
<td>✔</td>
<td></td>
<td>✔</td>
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<tr>
<td>Street Connectivity</td>
<td>✔</td>
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<td>✔</td>
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<tr>
<td>Social Capital</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Density</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

4.3 INTERVIEWS

Semi-structured interviews were conducted with two urban planners and two public health professionals at The Region to capture firsthand information about their experiences with collaboration. This provided insight into the strengths and weaknesses of the current process, as well as the extent to which the recommendations from the documents have been adopted in The Region. Participants were interviewed in their professional capacity.
4.3.1 General Considerations about Collaboration

Reasons for collaboration varied between all participants. The planning professionals originally began to collaborate out of a call from public health officials, such as Gayle Bursey and Dr. David Mowat, and because they had a particular skill set which would help improve the development of the tool. The public health professionals originally began to collaborate with planners due to concerns over the health status of The Region and the impacts the built environment can have on human health.

Originally, collaboration between the fields was not well received by some planners. In addition to viewing collaboration as a waste of time and resources, and perceptions of public health professionals as lacking necessary expertise, efforts were purposefully made to deter public health professionals from collaboration, by attempting to portray planning procedures as highly complex and inaccessible. As time wore on however, some planners acquiesced to the work that public health was conducting and realized the true potential and value of their work and in collaboration.

Most interviewees noted that they had minimal knowledge of what the other profession did. To remedy this, the public health participants were offered continual learning opportunities, such as webinars, and were connected with a planning mentor who taught them how to comment on planning documents and highlight the differences between the two fields. In contrast, none of the urban planners mentioned such opportunities for continual learning on public health matters. Despite this disparity in training, all participants stated that they felt much more informed after they collaborated with the other profession, and they quickly saw the rationale and direction of the other department during collaboration.

After speaking with each interviewee, it was evident that a strong interest in promoting collaboration had emerged, not only amongst the two departments, but also between developers, other sectors of government, not-for-profit organizations, and residents alike. Interviewees emphasised the need for a collaborative relationship with developers, as they may be the most opposed to the increased costs (real or perceived) of incorporating healthy built environment aspects into their development, such as sidewalks, lighting, and green space.

4.3.2 Implementation of HDI aspects into Peel Region Official Plan

Most interviewees indicated that there were a number of recommendations from The Region’s reports (HAT, PHIOLD, and HDI) that were driving their guiding policy framework in The Region’s OP and HDI tool development. Specifically, one policy in The Region’s OP, which indicated that OP amendment applications “may require a health background assessment”, was deemed especially useful, as it serves as a catalyst for conversations with the Locals. The HDI tool, which complements this policy, offers a way to evaluate development proposals and established research based evidence that The Region or Locals can bring forward to council. This policy and tool was developed in discussion with multiple parties including private developers.

The development of the current tool was initiated by the HDI tool and report; it was formalized into an official working tool when the HDI report was transformed into the Health Background Study (HBS) in 2011. In contrast to the HDI report, the HBS is tangible and easy tool, or checklist, for developers to assess their development on a variety of built environment factors. It was created for three reasons.
First, the HDI report was not a practical tool that could be utilized by the public or developers. Second, the HBS developed a terms of reference which outlines the purpose, scope, limitations, and area of knowledge. Third, based on stakeholder input, there was a desire to refine the seven categories of the HDI into six (the seventh category, Aesthetics and Human scale, was omitted as it overlapped with the sections of the other groupings): density, service proximity, land-use mix, street connectivity, streetscape characteristics, and parking.

The participants did note that this is a new policy and tool, and that they have to use an iterative and responsive approach to facilitate change in social, built environment, policy, and health patterns. The Region’s participants noted they will have to be reactive and open to suggestions on ways to amend the current process when needed. The Region uses a responsive approach to this because, to date, there is no formal template on what types of developments to look for. The policy in their OP uses the word “may”, meaning that it is discretionary. Currently there are no documented guidelines to dictate when The Region will formally request an assessment. Participants in planning noted that they receive very little development applications that are a surprise, as most applications have some degree of pre-consultation. When The Region receives an application where they feel an assessment would be an asset, they consult with public health to determine if they should ask for one. It is during the application process with the developer, when the “Terms of References” are discussed, that the merits of an assessment would then be deliberated.

All participants were unsure of any current changes to the process; however, they all stated that as they progress they will continue to strengthen their current policy and tool framework. One participant said that The Region will remove the ‘may’ one day from their O.P., and create a set of guiding documents or criteria for the assessment determination for The Region’s O.P.

### 4.3.3 Are Provincial Policies Supportive of Healthy Communities?

Each participant was asked if they felt that provincial policies were supportive and enabling of healthy community planning in Ontario. Participants generally felt that the Planning Act (PA), Provincial Policy Statement (PPS), and Places to Grow (PTG) had the intent to enable healthy community planning. However most indicated that the language used in provincial legislation needed more specific guidance and action-based policies for regional municipalities. Differences in opinion and understanding of provincial policies between the urban planning and public health professionals was apparent on this topic; while the planning participants were more knowledgeable on provincial polices, the public health professionals provided useful insight into their interpretations of these policies.

The public health participants spoke about similarities between the PTG and the HDI, but also noted the different perspective from which the provincial policy is written (i.e., that of growth management). They also spoke about a desire to be involved in the development of provincial policies to facilitate greater integration of public health priorities.

While the planning participants agreed on the strategic position of the PPS, they had a difference of opinion concerning how supportive provincial policies were of healthy community planning in Ontario. One planner stated that provincial policies currently don’t see planning as a way to improve public
health, while the other went on into detail about specific sections of each provincial policy that planners could spin to their advantage and use as a starting point. The latter participant identified several supportive policies within the PPS, including Section 1.1.1, particularly section C, Section 1.5.1, and Section 1.6.5.4, which are generally about healthy livable, active communities, and land use patterns which support alternative modes of transportation. Despite the broad scope and limited guidance offered by these policies, planners can leverage them to help drive regional and local policy development. These differing perceptions are important to note as they are a prime example of the diversity in opinion amongst planning professionals with respect to community health.

Finally, Bill 51 of the Planning Act was discussed in the interviews. This bill, officially known as the ‘Planning and Conservation Land Statute Law Amendment Act’, came into effect on January 1, 2007 as a way to increase the ability for municipalities to increase the range of study requirements, in order to deem a development application to be complete. It was this bill that allowed The Region to amend their regional OP to require an assessment as a complete application for an OP amendment.

4.3.4 Are Regional Municipality of Peel Policies supportive of Healthy Communities?

All participants identified The Region’s OP as being supportive and enabling of healthy community planning. Furthermore, it was noted that their current OP is under review. The Region is expecting to advance their current OP and make it more supportive of healthy community planning than its current state. All participants were cognizant of their regional policies and understood that their Locals’ policies needed to be aligned as well. Participants spoke of intensification, pedestrian networks, service provision for the broader good, walkability, and links between health and transit, in terms of ways to improve the built environment and community well-being. Most participants felt that The Region’s policies had a strong integrated framework that was adaptable to a variety of agendas including health, environment, and sustainability; for that reason, The Region’s health goals can still be achieved if the agenda shifts.

The participants indicated that The Region is being strategic and patient in terms of moving from policy and processes to implementation. They are aware that this is an iterative process and therefore do not want to rush the development of a policy when they are still formatting their current process. Their Locals are also very responsive to The Region’s work and are supportive of their intent. While participants mainly spoke of section 7.3.6.2.2 in their OP, which states that the application ‘may be required to evaluate an application to amend The Region’s Official Plan’ including a ‘Public Health Impact Study’, a number of other sections of the OP aim to improve public health through improved development standards (Table 4.6).

Despite the view that The Region’s policies promote healthy community planning, some general concerns did arise from all participants. The first concern is that The Region is not the approval authority for development applications; they are simply a commenting agency. Therefore, The Region has to rely heavily on partnerships and collaboration to achieve broader goals with their Locals. The second is working with and managing developers and their immediate interests, which may not align with long-term broader community goals. The third is that The Region is not currently putting any of their own money into their current collaborative efforts. Development of the HDI, for instance, is being funded by
CLASP and federal sources, which raises the question of the long-term financial sustainability of these efforts.

Table 4.6 Health Assessment Policies in The Regional Municipality of Peel’s Official Plan

<table>
<thead>
<tr>
<th>Location</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Municipality of Peel Official Plan Amendment 24</td>
<td>7.9.2.9. The Region will prepare an assessment tool to evaluate the public health impacts of development, jointly with area municipalities</td>
</tr>
<tr>
<td></td>
<td>7.9.2.10 The Region will work jointly with the area municipalities to raise public awareness of the health impacts related to planning through public and private partnerships</td>
</tr>
<tr>
<td>Regional Municipality of Peel Official Plan Amendment 25</td>
<td>7.3.6.2.2 The Region may require health impact studies as part of a complete development application to amend The Regional Official Plan</td>
</tr>
<tr>
<td></td>
<td>7.9.2.3 The Region may develop public health indicators to analyze the effectiveness of Official Plan policies and serve as a basis for policy adjustments</td>
</tr>
</tbody>
</table>

4.3.5 Benefits & Limitations of Collaboration

The following offers a list of benefits and limitations for collaboration between public health and urban planning professionals that were mentioned by two or more participants. The benefits that were mentioned are as follows:

**Local Community Development and Well – Being**
- It encourages sustainability through a health promotion lenses.
- It promotes public transportation from a health perspective which aims to reduce automobile dependence.
- It could save people roughly $10,000-$11,000/year from private automobile ownership, which could be spent on capital contributions to a home.

**Regional Structure and Organizational**
- It brings a variety of skill-sets to the discussion such as: planning and public health professionals, councillors, developers, public works engineers, and community members.
- It can improve overall work outcomes as it brings a variety of skill sets and opinions to the discussion.
- It can increase buy-in from other departments and local agencies as the initiative becomes more
known amongst staff and the community.
• Its current stance on health and policy development could not have occurred without collaboration.
• It promotes the importance of cross-departmental information sharing. It is important to recognize the work that other departments are working on to join forces on common initiatives.

**Provincial Level**
• It helps move the overall health agenda forward with leverage from multiple players and departments.
• It helps Public Health entrenched provincial mandate and established a reputation in the community and is focused on evidence based decision making. Whereas planning is as much an art as it is science, and that planners have the ability to work with legislation and understand the research orientation.

The limitations that were mentioned are as follows:

**Regional Processes and Implementation**
• It is hard to prove causality, particularly with a tool that is still being developed.
• It is difficult getting more people concerned with public health in government and costly to promote publicly.
• The Region is only a commenting agency on development applications, thus the locals can choose to do what they please to the extent to which is in their authority.
• It involves “Training the Trainer”. Planners are trying to learn the methodology for the tool and make an effort to learn the language and value. The challenge is trying to persuade the audience when planners themselves are still not the expert on this topic.
• It involves a methodology that is not a cook-cutter approach yet. Developers may get confused when The Region asks one developer for a study and not others. It gives off the illusion that The Region is not really sure what they are doing. This is a challenge to maintain trust and confidence so that reputational management aspect can be maintained.
• They can’t tell developers exactly what and how to properly use the tool as it is a new, and iterative, approach.
• It involves learning the other department’s process and organizational structure, which is a steep learning curve.
• There are often staffing changes which involve training. This can be cumbersome when attempting to find a new employee.
• It requires understanding the reality of time and that regional and policy developments do not occur overnight.

**Legal and Legislative**
• It involves balancing divergent mandates at all levels of government.
• There is no current mandate to collaborate for all regional governments. Therefore limited staff, resources, and accountability to certain duties are a reoccurring issue.
• There is no driving mandate to collaborate from provincial legislation.
• It involves a great deal of management beyond regular mandated job descriptions and is resource intensive at all levels.
4.3.6 Features of Successful Collaboration in The Region

There were a number of features that participants noted as being integral to successful collaboration between public health and planning in The Region. First, the described the process as personality based and requiring champions, or those who are actively involved and invested. Second, collaboration has been an ongoing, iterative process, involving continual relationship building between both departments. It has also required transparent communication at all levels of government and between all levels of staff, which involves a great deal of invisible work. Finally, collaboration has required that all players understand that the overall direction of the initiative may change based on certain windows of opportunity (e.g., shifting from a health to a sustainability focus), but that the original health goals are still achievable.

Overall, participants were very supportive and pleased of the collaborative initiative currently befalling The Region, and placed strong emphasis on the collaborative piece in regard to the development of policies, plans, and reports at The Regional level. All would gladly collaborate again on initiatives such as this one as this initiative brought both personal and professional satisfaction to all participants. For all the participants, this work was more than development applications and health studies, it was about something bigger than one individual person; it was, and is about community well-being.
CHAPTER 5: CONCLUSION & RECOMMENDATIONS

5.1 Introduction
This study involved an in-depth analysis of collaboration between planning and public health in The Regional Municipality of Peel. In this final chapter, key findings from the document review and semi-structured interviews are presented, along with conclusions about collaborative initiatives between these professions to facilitate healthy community planning. Nine recommendations are made regarding the potential areas of improvement to collaboration and community health. These recommendations are provided for The Region, as well as for planning and public health audience at large in Ontario and across Canada.

5.2 Summary of Findings
This research involved an evaluative checklist, latent content analysis, and semi-structured interviews with two regional planners and two public health professionals. Each participant was responsive to the request for an interview, and was pleased to hear that research was being conducted on collaboration between public health and planning professionals. Three reports related to health and the built environment produced by The Region were examined; these were evaluated based on a healthy built environment checklist, assessed on the extent to which the key findings from the aforementioned reports were implemented. Interviews aided in capturing first hand experiences on collaboration from both professions.

5.2.1 Document Review
Each of the three reports contained a substantial amount of coverage of healthy community planning concepts. The origins of these reports were established in 2005 when a report was brought forward to council. This report highlighted how the built environment impacts human health and encouraged council to adopt Resolution 2005-1395, which directed that Peel Public Health professionals work with the planning department to study and make comments on planning processes and policies in which to improve community health and well-being (Lees, Redman, & Berland, 2010). The overall purpose of the three reports was to establish a foundation of literature and develop a tool at The Region in which to assess built environment elements in The Region.

In the first two reports, HAT and PHIOLD, all elements of the checklist were addressed. The HAT report was primarily information based, and the PHIOLD report was more action based (Table 4.5). These reports were also primarily research and evidence-based papers. The elements most frequently mentioned were walkability, transportation facilities, pedestrian infrastructure, and the natural environment, while social capital was addressed the least. A broader discussion on social capital was probably not mentioned as it is not fundamentally an element of the built environment. Other reasons may include that a) social capital concepts are complex and are therefore out of scope for their research and b) because social capital is hard to measure (Woolcock & Narayan, 2000). Finally very little was written about The Region’s current collaborative process in these reports.
The third report, HDI, was built upon the first two reports and provided an action for almost all the checklist elements. The HDI presents a strong commitment to the development of a healthy communities framework for regional municipalities, and in which to adopt a context-sensitive agenda that integrates health impact considerations into the development approval process. The primary purpose of this report was to utilize and expand upon the findings from the previous two reports to identify built environment elements than can be utilized as quantifiable elements in the HDI tool. The elements that were mentioned most frequently were walkability, land-use mix, proximity to services, and density, while as expected, social capital was the least discussed. The HDI provided a detailed course of action for all of the checklist elements except for social capital. Detailed policy recommendations promoting building setbacks, collaboration, density, and proximity to services, were frequently present. In contrast to the other reports, the HDI provided specific recommendations for collaboration between planning and public health.

5.2.2 Interviews

5.2.2.1 Collaboration at The Regional Municipality of Peel
Collaboration at The Region was initiated in 2005 by a call from public health representatives, Gayle Bursey (The Region’s Director of Chronic Disease and Injury Prevention) and Dr. David Mowat (The Region’s Medical Officer of Health). Planning participants were initially selected based on their own skill set, and not on their knowledge of the respective department’s work. At first, the collaborative relationship was not well received by some planners who felt that public health was not well equipped to comment on development applications. However, all participants stated that they felt considerably more knowledgeable after they collaborated with the other profession and began to grasp their perspective on the matter. After speaking with each interview participant, it is quite evident that they avidly support collaboration amongst the two departments, as well as between developers, other sectors of government, not-for-profit organizations, and residents alike, to achieve their health and sustainability goals.

According to the interviewees, a relationship with developers is imperative. Developers may be opposed to the increased or perceived costs of incorporating healthy built environment aspects into their development, such as sidewalks, lighting, and green spaces. As such, establishing a working relationship is vital to the success of this project and The Region’s ability to move ahead.

5.2.2.2 Policy Context
In regard to the perceptions of provincial policy as supportive and enabling of healthy community design and policies, both general literature and interview participants felt that provincial policies offered useful general guidance for healthy community planning and design, but lacked specific support and local guidance that regional and local municipalities require. For example the Provincial Policy Statement (PPS) states in Section 1.1.1 that healthy, livable and safe communities are sustained by: ‘promoting efficient development’, ‘accommodating an appropriate range and mix of’ uses and ‘promoting cost-effective development standards’. However what The Region is looking for is further guidance on how to promote, and how to accommodate those factors. The PPS provides broader level policy direction to The Region and Locals and, at a higher level, is supportive of their initiative as a whole. With the recent release of the new PPS (effective April 30, 2014), there is more emphasis placed on healthy
communities, active transportation, and the environment, and with that, hope within The Region that this policy can be used to leverage resources, provincial support, and guidance from the province for healthy community planning.

In terms of The Region’s policies, interviewees generally felt they were supportive and enabling of healthy community planning. All participants were cognizant of their region’s policies and understood that their Locals’ policies needed to be aligned as well. To that point, interviewees also felt their Locals were responsive to The Region’s collaborative work on forming healthy community policies and supportive of their intent. Most participants stated that The Region’s policies have an integrated framework, without it necessarily being a ‘health’ agenda. In terms of implementation, The Region is being patient and strategic, and careful not to rush the development of a policy when they are still formatting their current process. Overall, participants placed strong emphasis on the collaborative piece as being vital in regard to the development of policies, plans, and reports at The Regional level.

5.3 Current Work at The Regional Municipality of Peel
Currently The Region is reviewing and drafting amendments to their OP to strengthen the policy language for a health assessment. The changes will not only include requirements for more evidence-based information, but will also communicate and ensure that these requirements will be enforced. This will fundamentally help direct the Locals with improved integration of the health assessment. Additionally, since the tool’s assessment is principally about interconnectedness, The Region’s planning and public health departments are also going to primarily focus on large scale developments, such as at the secondary or block plan level. The reasoning for this is because it is simply not practical to assess health impacts at a smaller scale, such as a site plan level. Currently under review, Public Health is piloting the development of a health impact study for Greenfield sites. The amendments to The Region’s OP will be brought forward to council in May 2014, and be opened up for public comment by June 2014.

5.4 Recommendations
From this research, a set of nine recommendations have emerged that can aid in collaborative processes between the planning and public health communities. The following recommendations have been broken down into three categories: Operations (4), Community Outreach (2), and Future Advances (3). Most of the recommendations are divided into two parts; first a general recommendation for the planning and public health community at large, and then a specific recommendation for The Region. If a specific Regional Municipality of Peel recommendation is not stated, then the general recommendation should also be utilized at The Region.

5.4.1 Operations
Recommendation One: Offer opportunities for continual learning by means of employee development. Today, regional governments and businesses alike are faced with many changes. Continuous educational development for employees is associated with improved organizational performance, enhanced project outcomes, and overall satisfaction for employees. This will also allow for professionals in both departments to increase their understanding of the other division’s processes and functioning (Service Canada, 2014). This style of capacity-building involves linking staff with opportunities for professional development such as webinars, seminars, classes, conferences, and
professional networks, which can enable employees to improve their own actions and plans and inject novel practices into the workplace (Kotchtenzy, Frumkin, Rodriguez, & Dannenberg, 2006; Valkoa, et al., 2011). Another opportunity to improve skill development is for senior staff to mentor junior staff. For example, having a planner or public health professional mentor, which The Region is currently doing.

For The Regional Municipality of Peel: It is evident that continual education and mentoring is important for sustained collaboration in The Region. There appears to be a strong medium for this in the public health department, but not in the planning department. It is recommended that continual educational be equally utilized an emphasized on both sides of the collaborative relationship. For planners at The Region, this recommendation provides a specific opportunity to meet their professional learning credits.

**Recommendation two: Operationalize collaboration.** This recommendation looks at ways to operationalize development through a collaborative process that would be transitioned gradually over several years. Stage one, the awareness stage, may involve the sharing of plans and projects with each department. For example, the planning department may wish to share plans with the public health department on upcoming initiatives (monthly or quarterly). Stage two, the feedback stage, would be more collaborative, where each department would ask for feedback. Stage three, a commitment phase, would involve full collaboration on projects, where public health or planning would own the project, but would involve all key stakeholders in the development of the project. All of these phases have been completed at The Region (Northridge & Sclar, 2003). Finally, when operationalized, it would be beneficial if the process and procedures were officially documented, so that they could be utilized by other regional governments (PARTNER, 2011).

For The Regional Municipality of Peel: The Region has been devoted to operationalizing collaboration at The Region. The next step in the development of their work is to professionally document and publish their procedures and findings to date so that they could be utilized by other regional governments. This could be completed by means of a fourth report at The Region, and through publishing in local and Canadian journals such as the Ontario Planning Journal, Plan Canada, or the Canadian Journal of Public Health.

**Recommendation Three: Improve accountability measures.** As mentioned by interview participants, and found within the literature, workload and accountability can often be a point of contention when roles and responsibilities are undetermined during the initial stages of a project. Collaborative projects, such as that undertaken at The Region, involve a range of key actors, tools, and challenges, all of which can affect staffing behaviors and project outcomes. Improving accountability through the demand side of each project can aid in improved outcomes with multi-sector approaches. This approach however may be harder than expected as each department is continually learning from the other and will need to rely on the other division for help. As such, accountability may need to be placed on more than one individual or department, who is responsible for different projects or research (Narang & Reutersward, 2006). It is recommended that one project manager be assigned to each venture and establish to whom they are accountable, and for what tasks each staff member is accountable.
For The Regional Municipality of Peel: As mentioned in the interviews, accountability, between the two respective departments, was noted as a vital step in their processing’s that was not yet formalized. Discussion should take place on how to improve project and task accountability between the public health and planning department.

**Recommendation Four: Funding Opportunities, Risk Management and Contingency Measures.** The Region’s current process of collaboration between public health and planning professionals is relying solely on funding from CLASP and the federal government. Thus The Region’s collaborative efforts are not a result of taxation at The Regional level. If this funding runs out, then it is unclear how The Region will continue with their collaborative process. Many organizations face this issue, and should have a contingency plan prepared if the situation should arise, and to consider looking outside government funding to other large organizations for support, such as the Urban Public Health Network, Coalitions Linking Action & Science for Prevention (CLASP) the Heart and Stroke Foundation, the Canadian Institute of Planners, local health authorities and private sector sponsors (Bertrand & Brown, 2006).

Alternatively, as provincial resources become increasingly strained, the Province should provide incentives to regional municipalities who are being creative and progressive in their approaches toward community health and improvement. A comparable provincial program called the Creative Communities Prosperity Fund, funds municipalities and Aboriginal populations who use their cultural resources to generate opportunities for economic growth. Communities that are selected are innovative and novel with their techniques and project objectives (Government of Ontario, 2014). Therefore, regions would be best to strive for these ideals in order to compete for such funding.

For The Regional Municipality of Peel: As noted by an interview participant, The Region currently did not have a fiscal contingency plan. The Region should form a committee whose sole duty is to create risk management and contingency plan for if and when funding does end. It is important for this plan to include new and potential sources of funding. Acquiring funding may also require relationship building with other organizations.

**5.4.2 Community Outreach**

**Recommendation Five: Increase public awareness of collaborative efforts.** Capacity building is imperative to bolster support from community members, council members, developers, and the community at large. These types of initiatives involve working with local community organizations and taskforces, conducting local needs assessments and asset mapping, and establishing a strong medium for conversation and feedback. Most importantly is the development of a variety of social networks including tapping into and building upon existing local organizations, and potentially developing new networks (Valkoa, et al., 2011; Kretzmann & McKnight, 1993). For example a public event could be held to first inform the local community of the work that they are doing. Next, a workshop could be held with community members in which to leverage their ideas about ways in which to improve community health and well-being. Other means of reaching out to the public are social media forums such as twitter, Facebook, blogs, and educational podcasts. These mediums enable a continual ground for discussion between The Region and its community members. Citizens, developers and council members alike will
then benefit by learning about local development strategies and by taking a direct role in shaping their community (Jackson, 2002).

For The Regional Municipality of Peel: See Above.

**Recommendation Six: Engage community ‘champions’ to keep programs moving forward.** The Region has two community champions, which play a pivotal role in The Region’s healthy community planning initiatives. These champions are important for two reasons. First, they drive change, forge existing and new connections with other community leaders, and help share responsibility between public health and planning for the sustained development of healthy community policies. Such champions are often firmly invested in what they believe and act as strong advocates for local assets and community needs. Second, they act as role models for local staff, and other communities at large, and are thus crucial for sustaining a strong long-term and focused team (Valkoa, et al., 2011).

For The Regional Municipality of Peel: The champions at The Region should continue to build and foster a relationship with other like-minded professionals at The Region. When the time does come for these champions to move on to other means of employment, it is important to continue to have champions at The Region who continue to drive this health/sustainability agenda.

**5.4.3 Future Advances**

**Recommendation Seven: Consider the continual analysis and evaluation of current policies and programs.** This recommendation is twofold. First, there is a need for evidence-based studies for specific development applications and novel practices. The Planning Act, in Ontario, has preserved this analytical practice, and emphasized legislative requirements. However, the lack of detailed analyses in Ontario points to the need for more current research (Bray, Vakil, Elliott, & Abelsohn, 2005). Thus, regional governments should develop an individualized framework for all development types for both regional and local governments. Second, to do so, policies and tools need to be refined to ensure applicability across an array of development contexts. This framework is vital as it enables developers to recognize and draw attention to negative health impacts linked with their development applications (Coburn, 2004); something which The Region has partly completed. Rigor in continuous assessment and improvements of current policies will ensure improvements in precision, granularity and relevance when utilizing policies for tool development. For example, The Region’s OP policy for a health background study states that they “may” require an evaluation of an application to amend the ROP, including a ‘Public Health Impact Study’. Thoughtful consideration should be made for the pros and cons of changing ‘may’ to ‘shall’, or establishing a more definitive way, at the organizational level, of asking for a health background study for development applications.

For The Regional Municipality of Peel: See Above.

**Recommendation Eight: Continue to lobby the provincial government with appropriate changes.**

Changes to provincial legislation are needed to improve community health and well-being, and provide further guidance at The Regional level. First, enabling healthy and sustainable policies at the provincial level is imperative as it lays the foundation for regional and local policies and future development. This is significant since more immediate actions are possible and attainable by planners and public health
professionals at The Regional and local scale (HealthyCanada, 2012; Jackson, 2002). Second, other technical changes should be made to provincial acts, such as the PPS, which includes legal terminology such as ‘may’ and ‘shall’. For example, the most recent version of the PPS states that Official Plans, in section 16.2 a, ‘may’ include ‘a description of the measures and procedures proposed to attain the objectives of the plan’. If regional governments are not required to describe how they will obtain future goals and objectives, policies such as this at The Region, and any other section of the OP for that matter, may be more difficult to implement.

For The Regional Municipality of Peel: See Above.

**Recommendation Nine: Promote collaboration between sectors and levels of government.**
Collaboration between public health and planning professionals, the public and private sectors, and between all levels of government, specifically regional and local area municipalities, should be promoted. The importance of inter-sectoral and inter-governmental collaboration is twofold. First, as policies and plans are transformed from research to practical approaches, this process will involve multiple parties from a variety of professions (Brownson & Jones, 2009; Sallis et al., 2006). Second, the inclusion of local officials, design professionals, public health professionals, planners, and local advocates is needed in the development of comprehensive health planning strategies, since they involve a variety of components that can aid in shaping the community (Valkoa, et al., 2011).

For The Regional Municipality of Peel: See Above.

**5.5 Study Limitations and Opportunities for Future Research**
This study had several limitations worth noting. First, only four professionals, two from planning and two from public health, could be interviewed. This limited number of interviewees is not a representative sample of The Region’s employees, or of planning and public health professionals. However, the value gained from the four interview participants was imperative as they provided invaluable insights into their work and processes. Second, the checklist that was used to evaluate the three reports was based on general built environment features that are described in current academic literature, and thus not necessarily comprehensive. Nevertheless, the checklist was an unbiased and systematic strategy of reviewing and assessing the data, and was broad enough that it encompassed most of the healthy built environment indicators. Third, the research was conducted on one municipality that is known for collaborative work between these fields, which limits the generalizability of the findings to other municipalities or regions.

This study would have benefited from another case study where collaboration is not as established, to offer alternative findings. The benefit in studying The Region solely was beneficial as it was the only region I was studying, thus giving me sufficient time to study their methods in detail. This backing and evidence is also imperative as The Region is a leader in its collaborative health initiative in Canada (HealthyCanada, 2012). The Region is a vital precedent for other regional municipalities, and their process and procedures about The Region’s collaborative efforts should be made public. Fourth, researcher bias may have been introduced over the course of this study, given the researcher’s support...
for collaborative efforts between public health and urban planning professionals. To limit this bias, three major data sources were drawn upon including the literature review, document review, and interviews.

Further research in this area could benefit from:

1. Studies of other regions and municipalities in Canada where collaboration is taking place;
2. A survey to all public health and planning professionals, specifically about collaboration between these fields;
3. An in-depth policy and legislative analysis of restrictions on collaboration projects;
4. Speaking with The Region’s Locals to assess how they perceive the collaborative efforts at The Regional level; and
5. Conducting further research on The Region after they have reviewed and revised their official plan (in five years), and in 20-25 years, to assess a) any changes to their evaluative tool and policies and b) if there are any considerable differences in their built environment and public health outcomes for The Region’s residents.
6. Speaking with the Ontario Public Health Association and the Ontario Professional Planning Institute to gain insights into the profession’s perspectives (Bergeron, 2012).

5.6 General Conclusions

This study examined the current collaborative process between public health professionals and urban planners that is aimed at improving and promoting healthy communities and policies in The Regional Municipality of Peel. In the upcoming years, The Region will need to bring a critical eye and novel interventions in order to perfect and refine their collaborative development review process. As The Region’s built environment and health status shifts The Region will be addressing a great deal of novel questions from public health, planning, the community, politicians, and like-minded professionals. These questions will be in regards to internal accountability measures between the public health and planning departments, new strategies to development applications, and external measures such as changes in social and political dynamics, and fluctuations in community health (HealthyCanada, 2012). The Region, planners and health professionals alike, will continue to see the need for evidence-based evaluation tools, such as the one reviewed in this paper. By applying current research, planners and health professionals will be able to assess impacts of different types of land-use scenarios on public health.

Over the past two decades, our understanding of the complex interactions between the built environment and human health has become gradually more apparent to planning and public health professionals (Smart Growth Network, 2012). Currently, there is mounting evidence that certain land-use development choices can negatively impact the health of local residents (Dannenberg, Frumkin, & Jackson, 2011). This evidence was once not on the planning and public health radar, and had little documented on the matter. To avoid perpetuating these harmful land-uses, efforts are underway to establish tools for public health and urban planning professionals to collaborate. These tools are vital in order for them to work together effectively, and to evaluate local health impacts of various approaches to development. With broad and minimal guidance at the provincial level, regional and municipal governments will need to call upon visionaries, or champions such as Gayle Bursey and Dr. David Mowat, who are willing to act and devote time to the development of such tools and policies. This call
involves developing a collaborative strategy to foster the development of current approaches, and allow them to be publicly shared with other regional governments. The provincial government should incentivize those regional municipalities who are being more creative, who collaborate, and who demonstrate more efficient and effective results for their community. Additionally, regional governments should also be aware of novel practices, such as The Region’s, be proactive in collaboration, and seek to see themselves as leaders for their Locals. With the expected growth in our urban populations (Toronto Public Health, 2012), the demand and focus needs to be on the connections between the built environment and public health (Northridge & Sclar, 2003). A joint public health and urban planning approach asks the right type of questions about the built environment and public health (HealthyCanada, 2012). It can help with the selection of useful built-environment and health indicators to improve current monitoring programs and evaluate the efficiency of proposed programs, policies, and infrastructure, in order to advance validity for their joint efforts.
Bibliography


National Collaboration Centre For Healthy Public Policy. (2010). *National Collaboration Centre For Healthy Public Policy*. Retrieved from Identify models and actors for intersectoral collaboration:


Appendix A: 
Recruitment Email

Dear ____________,

Good ________________ (morning/afternoon),

My name is Heather McDonell and I am a second year grad student in Urban and Regional Planning at Queen’s University. Over the next year I will be conducting research on Improving Community Health Through Collaboration Between Public Health and Urban Planning in The Region of Peel. The goal of this research is to continue the discussion on collaboration between public health and urban planning. I will be addressing key findings from three Peel Region reports, and interviewing individuals who have been involved with collaboration to address the strengths, areas of improvement, and key findings.

I would like to invite you to participate in this research in the form of a semi-structured interview. Your participation in this project is entirely voluntary and would take about 20 to 30 minutes of your time. If you are interested please see the letter of intent attached to this email for more information, and please let me know at your earliest convenience. If you have any questions I am available to tell you more about the project, so do not hesitate to contact me.

Your contribution would be highly valuable and greatly appreciated!

Sincerely,

Heather McDonell

*This study has been granted clearance according to the recommended principles of Canadian ethics guidelines, and Queen’s policies.*
Appendix B:
Letter of Information

This research is being conducted by Heather McDonell under the supervision of Dr. Patricia Collins, in the Department of Urban and Regional Planning at Queen’s University in Kingston, Ontario.

What is this study about? This research will contribute to a better understanding of an interdisciplinary approach between public health and urban planning in The Regional Municipality of Peel. The overall research goal, through exploration, interviews and analysis is to facilitate greater collaboration, provide a body of literature to the urban planning and public health research community, and promote healthy communities. The study will require one 30 minute interview at The Region of Peel or over the phone. There are no known physical, psychological, economic, or social risks associated with this study.

Is my participation voluntary? Yes, your participation in this project is entirely voluntary! If any questions or discussions make you uncomfortable, you may withdraw your information and end your involvement at any time during the research process. If you agree to participate we will make every effort possible to protect your anonymity during the process and in the final report, so it is very helpful for the research if you can answer as honestly and truthfully as possible. You may also withdraw at any time with no effect on my standing in school.

What are the benefits to participating? Your responses can help identify areas that are current, are not found in literature, and are first hand experiences that require attention, which will help the researcher with their final objective for the report. You may also be discussing relevant public health and planning information.

What will happen to my responses? Your responses will be kept confidential. Any responses given during the research process will be kept in one password-protected computer and files. Only the researcher will have direct access to this information, and the responses will be destroyed appropriately upon completion of the project. To help with this, please do not put your name on any study response sheets or materials unless you would like your name included. No individual information will be conveyed in the final report and responses will be reported as part of a group. The Region of Peel is made up of a small community of urban planning and public health professionals. Although all identifying information, such as names and job titles, will be kept confidential, due to the small network of professionals, particular points of view or statements could be traced back to the individual.

How do I find out about the results of the study? This report will be completed by the end of May 2014. If you would like to receive a copy of the report, please inform the researcher, or see the Queen’s School of Urban and Regional Planning website. The report will also be available online, once it has been reviewed by internal and
external reviewers.

**What if I have concerns?**
Any questions or concerns about the research or the questions being asked may be directed to Dr. Patricia Collins at patricia.collins@queensu.ca or (613) 533-6000 x 77060. Any ethical concerns about the research may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

Thank you for your participation in this research, I greatly appreciate the time you take to respond.

All the best and I look forward to hearing from you,
Heather McDonell

*This study has been granted clearance according to the recommended principles of Canadian Ethics guidelines and Queen's policies.*
Appendix C: Consent Form

“IMPROVING COMMUNITY HEALTH THROUGH COLLABORATION BETWEEN PUBLIC HEALTH AND URBAN PLANNING: A CASE STUDY IN THE REGION OF PEEL”

Name (please print clearly): ________________________________________

1. I have read the Letter of Information and have had any questions answered to my satisfaction.
2. I understand that I will be participating in the study called “Improving Community Health Through Collaboration Between Public Health and Urban Planning: A Case study in The Region of Peel”. I understand that this means that I will be asked to answer a series of questions about this collaboration.
3. I understand that my participation in this study is voluntary and I may withdraw at any time. I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only the researcher and supervisor will have access to this information, and the responses will be destroyed or filed securely and appropriately upon completion of the report. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will be of general findings and will never breach individual confidentiality. Should you be interested, you are entitled to a copy of the findings.
4. I am aware that if I have any questions, concerns, or complaints, I may contact Heather McDonell, 12hm5@queensu.ca; project supervisor, Dr. Patricia Collins patricia.collins@queensu.ca or (613) 533-6000 x 77060; or the Chair of the General Research Ethics Board chair.GREB@queensu.ca or 613-533-6081 at Queen’s University.

I have read the above statements and freely consent to participate in this research:

Participants Signature: __________________________________________
Date: _________________________________________________________
Appendix D: 
Interview Guide for Urban Planners

Introduction Questions

1) What drivers lead you to collaborate with public health professionals?
2) When you originally started to collaborate, how familiar were you with public health policy and procedures before collaboration?
3) Do you feel more informed now that you have collaborated with public health?

Report(s) Specific

4) Which of the following reports are you aware of?
   a) The Peel Healthy Development Index
   b) Evaluating the Public Health Impacts of Land Development Decisions in Peel
5) Which of the above three reports have you collaborated on?
6) What, if any, recommendations from these reports were implemented in Peel Region?
7) Do you think collaboration was essential in the development of these reports?
8) Would you like to collaborate (again) on something like this with public health professionals? Why or why not?
9) What information do you feel you bring to the discussion as a planning professional?
10) What have you learned from the public health profession?

Policy

11) In your professional opinion, are provincial policies supportive and enabling of healthy community design and policies? Why or why not? Which are more supportive and which are less supportive? Be specific as possible.

12) In your professional opinion, are Peel policies supportive and enabling of healthy community design and policies? Why or why not. Which are more supportive and which are less supportive? Be specific as possible.

Closing/General

13) What, if any, benefits exist regarding collaboration between public health and urban planning?
14) What, if any, limitations or challenges did you face during the collaboration process?
15) What can other Canadian municipalities learn from your collaborative efforts between public health and planning professionals?
16) Do you have anything to add?
Appendix E: Interview Guide for Public Health

Introduction Questions

1) What drivers lead you to collaborate with planning professionals?
2) When you originally started to collaborate, how familiar were you with planning policy and procedures before collaboration?
3) Do you feel more informed now that you have collaborated with planning professionals?

Report(s) Specific

4) Which of the following reports are you aware of?
   a) The Peel Healthy Development Index
   b) Evaluating the Public Health Impacts of Land Development Decisions in Peel
5) Which of the above three reports have you collaborated on?
6) What, if any, recommendations from these reports were implemented in Peel Region?
7) Do you think collaboration was essential in the development of these reports?
8) Would you like to collaborate (again) on something like this with planning professionals? Why or why not?
9) What information do you feel you bring to the discussion as a public health professional?
10) What have you learned from the planning profession?

Policy

11) In your professional opinion, are provincial policies supportive and enabling of healthy community design and policies? Why or why not? Which are more supportive and which are less supportive? Be specific as possible.

12) In your professional opinion, are Peel policies supportive and enabling of healthy community design and policies? Why or why not. Which are more supportive and which are less supportive? Be specific as possible.

Closing/General

13) What, if any, benefits exist regarding collaboration between public health and urban planning?
14) What, if any, limitations or challenges did you face during the collaboration process?
15) What can other Canadian municipalities learn from your collaborative efforts between public health and planning professionals?
16) Do you have anything to add?
## Appendix F:
Quantitative Evaluative Framework for An Evidence & Best Practices Based Review For The Development Of A Health Assessment Tool (HAT) Report

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<td>Connection; Sidewalks; Road Network</td>
<td>Y</td>
<td>34</td>
<td>Somewhat Present</td>
<td>7</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Social Capital</td>
<td>Socially Vibrant; Social network; sense of community</td>
<td>Y</td>
<td>3</td>
<td>Weak</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Land-Use Mix</td>
<td>Mixed-use Development; Functionally integrated; Zoning</td>
<td>Y</td>
<td>32</td>
<td>Somewhat Present</td>
<td>8</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Proximity to Services</td>
<td>Closeness; Proximity</td>
<td>Y</td>
<td>10</td>
<td>Weak</td>
<td>9</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Density</td>
<td>Intensification;</td>
<td>Y</td>
<td>63</td>
<td>Somewhat</td>
<td>3</td>
<td>Present</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Score</td>
<td>Present</td>
<td>Code</td>
<td></td>
<td></td>
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<td>------------------------------------------</td>
<td>-------</td>
<td>-----------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compactness</td>
<td></td>
<td></td>
<td>Present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>Transit; Transportation; Roads; Bus Shelter</td>
<td>74</td>
<td>Present</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>Path; Pedestrian; Amenities</td>
<td>38</td>
<td>Somewhat Present</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>Environment; Pollution</td>
<td>42</td>
<td>Somewhat Present</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 = Not Present
1-9 = Weak
10-39 = Somewhat Present
40-89 = Present
90 ≤ Strongly Present
### Appendix H:
Quantitative Evaluative Framework for the Peel Healthy Development Index (HDI) Report

<table>
<thead>
<tr>
<th>Themes (Dichotomous variable)</th>
<th>Key word identifiers</th>
<th>Present (Y/N)</th>
<th>Theme Frequency</th>
<th>Theme Ranking</th>
<th>Total Ranking of Frequency</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walkability</td>
<td>Pedestrian; Walking; Active transportation; Accessibility</td>
<td>Y</td>
<td>113</td>
<td>Strongly Present</td>
<td>3</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Partnership; Collaborate; Cooperation; Combination; Team work, Relationship; “to work with”; consultation; inter-departmental; inter-sectoral; co-ordination</td>
<td>Y</td>
<td>23</td>
<td>Somewhat present</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Street Connectivity</td>
<td>Connection; Sidewalks; Road Network</td>
<td>Y</td>
<td>78</td>
<td>Present</td>
<td>5</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Social Capital</td>
<td>Socially Vibrant; Social network; sense of community</td>
<td>Y</td>
<td>1</td>
<td>weak</td>
<td>10</td>
<td></td>
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<tr>
<td>Land-Use Mix</td>
<td>Mixed-use Development; Functionally integrated; Zoning</td>
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<td>125</td>
<td>Strongly Present</td>
<td>2</td>
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</tr>
<tr>
<td>Proximity to Services</td>
<td>Closeness; Proximity</td>
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<td>104</td>
<td>Strongly Present</td>
<td>4</td>
<td>Present in the Table of contents</td>
</tr>
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<td>Density</td>
<td>Intensification; Compactness</td>
<td>Y</td>
<td>195</td>
<td>Strongly Present</td>
<td>1</td>
<td>Present in the Table of contents</td>
</tr>
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<td>-----------------------------</td>
<td>-------------------------------</td>
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<td>-----</td>
<td>-----------------</td>
<td>---</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Transportation Facilitates</td>
<td>Transit; Transportation; Roads; Bus Shelter</td>
<td>Y</td>
<td>71</td>
<td>Present</td>
<td>6</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Pedestrian Infrastructure</td>
<td>Path; Pedestrian; Amenities</td>
<td>Y</td>
<td>42</td>
<td>Somewhat present</td>
<td>7</td>
<td>Present in the Table of contents</td>
</tr>
<tr>
<td>Environmental Disparities</td>
<td>Environment; Pollution</td>
<td>Y</td>
<td>9</td>
<td>Weak</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

0 = Not Present
1-19= Weak
20-49 = Somewhat Present
50-99 = Present
100 <= Strongly Present
Appendix I:
SURP Unit Research Ethics Board

SURP Unit Research Ethics Board
SURP 800 Report & Thesis Research Ethics Application Form

<table>
<thead>
<tr>
<th></th>
<th>Name of Student: Heather McDonell</th>
<th>Student Number: 05884698</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Supervisor: Dr. Patricia Collins</td>
<td>Date SURP 800 proposal approved: October 17, 2013</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Title of Study:</strong> Improving Community Health Through Collaboration Between Public Health And Urban Planning: A Case Study In The Region Of Peel</td>
<td></td>
</tr>
</tbody>
</table>

**Purpose of Study:** There is ample evidence linking the quality of the built and natural environment to public health. Declining physical activity levels and increased instances of health disparities are amongst some of the greatest concerns to both the general public and professional urban planning and public health communities. The information gathered in this report will help planners, public health professionals and those in academia, better understand an interdisciplinary approach between public health and urban planning in the Regional Municipality of Peel.

The research objectives will be addressed using the following two methods. The first objective will be addressed through a document review of two reports completed for Peel Region and will be assessed based on a set of criteria. The second research objective will be conducted through semi-structured interviews of urban planning and public health professionals at the Region of Peel. This report aims to facilitate conversation about the strengths and areas for improvement in collaboration between urban planning and public health. When research is completed, this study will provide key findings and recommendations for collaboration between public health and urban planning in the Region of Peel. It is my intention to share the final report with these individuals to further encourage conversation on collaboration and community well-being.

| 4. | **Method of Collecting Data:** (if applicable, attach sample of questionnaire or other data collection instruments). |

**Document Review**

A document review will be conducted to analyze healthy built environment initiatives at Peel Region. The three documents being reviewed are the ‘Peel Healthy Development Index 2009’, ‘Evaluating the Public Health Impacts of Land Development Decisions in Peel 2009’, and ‘An Evidence & Best Practices Based Review for the Development of a Health Assessment Tool 2008’. These reports will be qualitatively and quantitatively evaluated based on their efforts to address collaboration, as well as the following nine characteristics of the built environment that are associated with human health: proximity to services, walkability, land use mix, density, street connectivity, transportation facilities, pedestrian infrastructure, social capital, and environmental disparities (Dannenberg, Frumkin, & Jackson, 2011). Therefore, the documents will be reviewed based on the 10 themes identified above.
Key Informant Interviews

Conducting semi-structured interviews with public health and urban planning professionals will capture firsthand information on collaboration at RMP. This will provide insight into the strengths and weaknesses of the current process, as well as the extent to which the recommendations from the document review have been utilized in RMP. From these interviews I will provide key findings and recommendations about collaboration.

Sample & Recruitment

The ‘interview group’ will consist of urban planners and public health professionals from RMP who have had experience collaborating with the other field. Approximately 4-8 individuals will be interviewed, roughly half from each respective department. A primary contact will be established at RMP. A list of potential interviewees will be established and contacted by email. The goal of this first email is to introduce myself and the research study, to make it clear how I gathered their contact information, describe what I am researching, why I would like to interview this individual, and indicate how long the process will take.

The above content will be achieved by writing a recruitment email, letter of intent, and letter of consent, all of which will be attached in the first email. Once the informant has provided consent, further contact can be made about the interview.

Administration and Analysis

A series of semi-structured interviews, lasting no more than 30 minutes in length, will occur with the participants. An interview guide will be created to examine the collaborative process with which they have been involved. The interviews will take place at the RMP main office, or over the telephone. These interviews will take place in January 2014. The data will be analyzed thematically, based on the following six categories: reoccurring themes, benefits, limitations, next steps, policy, and other relevant aspects. The analysis will involve the following steps: initial impressions on the transcripts; coding relevant phrases, words, sentence or sections; and identifying recurring, expected, and unexpected themes.

Questions

Final interview questions will be determined based on the profession of the participant. For this reason, the questions being asked are still being determined. However, a foundation of questions can be found in the attached documents for this ethics package. The objectives of the interviews are: to find out what Peel Region is doing to implement key recommendations from the document review; to gather information on what collaborative processes they have taken part in; to understand their views on the challenges and strengths of the process; and to assess where they see the future of collaboration.

5. How many research participants? ___4-8___
Are participants recruited through publicly-accessible information? Yes ☐ No ☒
If No, please explain:
A term adjunct instructor at the Queen’s School of Urban and Regional Planning will be aiding in the interview participant selection process. She is also an individual who has professional capacity in the private sector and has worked directly on the collaborative efforts between public health and urban planning professionals in the Region of Peel.

<table>
<thead>
<tr>
<th>6.</th>
<th>Are research participants included in their professional capacity?</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If yes, are research participants community planners ☐ public officials ☐ consultants ☐ community group leaders ☐ media ☐ (check all that apply)</td>
<td>Public Health</td>
</tr>
<tr>
<td></td>
<td>Other ☐</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Are research participants made vulnerable by social, cultural, or economic circumstances?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>c. Does your research involve children?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>☐ First Nations? ☐ the elderly? ☐ other persons who lack the capacity to consent for themselves ☐ (check all that apply)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Yes, please explain:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Is institutional approval required? (e.g. schools, hospitals, prisons)</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If Yes, please explain:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7.</th>
<th>Will participants’ confidentiality or privacy be protected?</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do the LOI and consent form reflect this?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td></td>
<td>If No, please explain:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8.</th>
<th>Does the method involve deception of the participants?</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If Yes, please explain method of debriefing:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9.</th>
<th>Will participants be free to withdraw at any time?</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do the LOI and consent form reflect this?</td>
<td>Yes ☐ No ☐</td>
</tr>
</tbody>
</table>

| 10. | Will the data be collected and stored in a secure manner (i.e. password protected file; locked office; locked storage, etc.)? | Yes ☐ No ☐ |

| 11. | Will participants be remunerated for their participation? | Yes ☐ No ☐ |

| 12. | Will participants be exposed to any risks greater than those encountered in aspects of their everyday life? | Yes ☐ No ☐ |

Attach: Letter of Information & Consent Form, Questionnaires / data collection materials and Recruitment notice, (final versions to be a report /thesis appendix); CORE Certificate

| SUPERVISOR DECISION: Approved ☑ | Date: Oct 23, 2013 | Resubmit ☐ Date: |
| Supervisor (Signature): | |

Application requires Unit REB approval YES ☐ NO ☐ (If yes, forward to Unit REB Chair)

Approved (if necessary) by SURP Unit REB Chair: Date: |

SURP Unit REB Chair Decision: ROMEO application required for expedited for full review YES ☐ NO ☐

Date Application returned to supervisor: |