Exploring the concept of health in planning: A case study of suburban HRM

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This research falls within the work undertaken by Dr Jill L. Grant in examining trends in the development of Canadian suburbs. Please visit her website for further information on the research:
http://theoryandpractice.planning.dal.ca/html/suburbs_project/suburbs_index.html.

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Executive Summary

Planning has evolved over time to include many philosophies, some of which touch on health. The professions of planning and health have collaborated, to varying degrees, since the mid 19th century. In recent decades, health emerged as a contemporary issue in planning under the rubric of healthy communities, broadly considering the effect that personal and environmental factors have on the health of community residents. The focus of healthy communities has re-emerged over the past decade in a modified form. The current scope of academic research and national initiatives, while recognizing the importance of the natural environment, narrowed the definition to target the built environment and its relationship with health. The narrower scope examines the ability of residents to be physically active in their surrounding built environment.

While planning's interest in health and healthy communities may fluctuate, the current attention presents an opportunity to explore these concepts in greater detail. My research examines whether high-level policy and research discussions linking health and planning have filtered down and influenced community-level discussions. I spoke with residents, councillors, developers and planners to understand how they use and interpret the concept of health in planning and inhabiting suburban residential developments in the Halifax Regional Municipality (HRM) of Nova Scotia. HRM, located on the Atlantic coast of Nova Scotia, has a population of approximately 403,000 people, with many residents choosing to live in the suburbs.

Stemming from Dr Jill Grant's large-scale research effort, *Trends in Residential Environments: Planning and Inhabiting the Suburbs,* my research represents the first time a focus on health has been included in the broader project. I addressed the following research question using qualitative methods: *How is the concept of health being used and interpreted in the planning discourse about suburban residential developments in the Halifax Regional Municipality*? I interviewed 26 individuals (a mix of residents, councillors, developers and planners) in June and July 2011. Interviews focused on general suburban trends, and explored the extent to which health is considered in planning suburban residential developments in HRM. I conducted observational field surveys, spoke with experts, and reviewed municipal planning documents to augment the interview findings.

Health proved to be part of the discussion of planning suburban residential developments in HRM. Some respondents asked for clarification of what I meant by health or healthy communities. This uncertainty suggests that health is not a common discussion point in planning.

Respondents tended to use health in ways that advanced their own agendas. Health was frequently used to frame other contemporary planning approaches and concepts. Councillors, developers and planners mentioned numerous themes when discussing health, including active transportation, personal health such as physical activity, the

natural environment and complete communities that provide amenities and services for residents. In describing their neighbourhoods as healthy communities, residents talked about environmental aspects such as parks and green space, recreation facilities, the natural environment, and personal health.

The perspectives of HRM councillors, developers and planners on the topic of healthy communities align with contemporary ideas. In these discussions, there was an absence, at times, linking environmental supports and resulting human health. Many respondents did not account for personal constraints of residents, (e.g., family responsibilities), that might limit their ability to use environmental amenities such as trails and pathways. Respondents focused on tangible aspects of healthy communities, often discussing easy to implement features such as infrastructure (e.g., trails). The more challenging social aspects of planning, such as affordable housing, were discussed infrequently or vaguely. Several planners and councillors spoke of concern about the lack of affordable housing initiatives in HRM, but did not provide potential mechanisms to address it.

Health provides a unifying concept that supports and helps frame other contemporary planning approaches. My research provides a snapshot in time of the current focus of health in planning suburban HRM. While there is awareness of health among respondents, this is not necessarily translating into a comprehensive application of health and healthy communities. An opportunity presents itself to local planners and health professionals to re-examine the concept of health in planning suburban areas of HRM, and jointly assess if more could be done to translate concepts and policies into practice.

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1.0 Introduction

Approximately 80% of Canadians live in urban areas (Government of Canada, 2011). In those urban areas, the suburbs prove a popular choice as a place of residence. That trend holds true in the Halifax Regional Municipality (HRM) of Nova Scotia where suburban populations continue to rise (HRM, 2011). Planning efforts directed at the suburban context in HRM strive to ensure residents benefit from a well designed, supportive environment.

Planning has evolved over time to include many philosophies, some of which directly or indirectly touch on health as a theme. For example, new urbanism speaks to walkable communities. In recent decades, health emerged as a contemporary issue in planning under the rubric of healthy communities. The 1980s saw the beginning of the Healthy Communities and Healthy Cities movements, connected with the World Health Organization (WHO). The international Healthy Cities movement "engages local governments in health development through a process of political commitment, institutional change, capacity-building, partnership-based planning and innovative projects" (World Health Organization, Regional Office for Europe, 2011: online). Recent studies of urban pattern and form examine the intersection of community design with health, most often focusing on the impact of the built environment on physical activity (Frank et al., 2007, 2005; Forsyth et al., 2008; Williams, 2007).

The academic literature discusses collaboration between the fields of planning and health (Barton, 2009; Frumkin, 2005, 2003). "The professions of urban planning and public health spring directly from the same source: a response to overcrowding and lack of adequate sewerage and water infrastructure in rapidly industrialising cities during the nineteenth century" (Crawford, 2010: 9). Barton (2009: S115) recently suggested that "only now, with concerns over climate change and obesity, is there beginning to be the realisation that the physical environment is an important determinant of health". I would argue that nineteenth century efforts recognized the link between physical environment (living conditions) and health. While links between planning and health may have weakened over time, recent partnerships demonstrate interest to jointly address healthy community design. The World Health Organization (2010), the American Centers for Disease Control and Prevention (2006) and the Public Health Agency of Canada (2011, 2008) call for collaborative action. In 2005, the mayors and political leaders of the WHO Healthy Cities Network and the European National Healthy Cities Network released a statement on designing healthier and safer cities. In that statement, they declared their readiness "to put health considerations at the heart of all urban planning and generate political commitment and resources to achieve this goal" (WHO, Regional Office for Europe, 2005: online).

The Heart and Stroke Foundation of Canada (2010: 6) stated that "local planners, elected officials, property developers, residents and community organizations all have a role to play in designing local built environments and supporting active, healthy

community design". A renewed focus on collaboration between health and planning has led to connections between health sector organizations and developers at the national and local level (Thompson and Willison, 2007; Urban Public Health Network, 2010). An issue of interest is how people link ideas of health to suburban development in Halifax Regional Municipality.

1.1 Research Focus

My research examines the extent to which health is part of the discourse in the suburban residential development context of Halifax Regional Municipality (HRM), Nova Scotia. The project stems from a large-scale research effort, *Trends in Residential Environments: Planning and Inhabiting the Suburbs,* undertaken by Dr Jill L. Grant at Dalhousie University. Dr Grant's work, underway since the 1990s, examines suburban trends across Canada (Grant, 2007). The research "takes an interpretive qualitative approach to looking at how participants in the local planning and development process explain the choices and decisions they make in shaping suburban development" (Grant, 2007: online). The research on HRM also contributes to the project, *Global Suburbanisms: Governance, land, and infrastructure in the 21st century*, led by Dr Roger Keil at York University. The *Global Suburbanisms* project seeks to understand the global context for suburban development.

Dr Grant's mixed methods study of suburban trends includes interviews with decision-makers (developers, planners and city councillors) who build and/or support suburban residential developments, and residents who live in suburbs. Prior to summer 2011, Dr Grant's suburban trends research did not include a specific focus on health. HRM was the focus of that project in summer 2011 and I added health-specific questions to the interview schedule.

My research explores how decision-makers in HRM discuss the concept of health in planning suburban residential developments. I am referring to planners, elected officials and developers collectively as decision-makers, acknowledging that each group makes decisions in different contexts. The research project also examines the extent to which residents consider their neighbourhood to be a healthy community. My findings will inform planners and health professionals on the current discussion of health in the suburban context of HRM.

1.2 Defining Suburbs

The generic definition of a suburb describes it as "an outlying part of a city or town" (Merriam Webster, 2011). Millward (2002: 45) expands on this from a planning perspective, noting that "in the North American context, the term suburban residential development (SRD) is defined … as new construction on the fringe of the main built-up area, in which moderately high densities and small lot sizes (typically one tenth to one quarter acre, or 400 to 1,000 m^2) are achieved through (or necessitated by) the

provision of central services". My research project considers suburbs as both geographic and temporal phenomena that change through time.

1.3 Conceptualizing Health and Healthy Communities

My research focuses on the concept of health in planning suburban developments in HRM. The concept of health is contested; no singular definition exists. As Gallie (1956: 193) suggests in his discussion of essentially contested concepts, "recognition of a given concept as essentially contested implies recognition of rival uses of it". The World Health Organization (1999: 7) affirms that "health can mean many things to different people".

The World Health Organization definition of health suggests it acts as a resource for individuals and populations. We can then consider healthy communities and healthy cities as settings that support or hinder the health of a person or population. In recent years, the focus on health has shifted from healthy communities to healthy built environments. In that sense, the built environment provides a sub-setting within a healthy community. Figure 1 provides a visual representation of this notion.

> ***Health:*** *a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. Health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities.*
>
> *World Health Organization (1948: online)*

> ***Healthy Cities:*** *a healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.*
>
> *World Health Organization (1999: 23)*

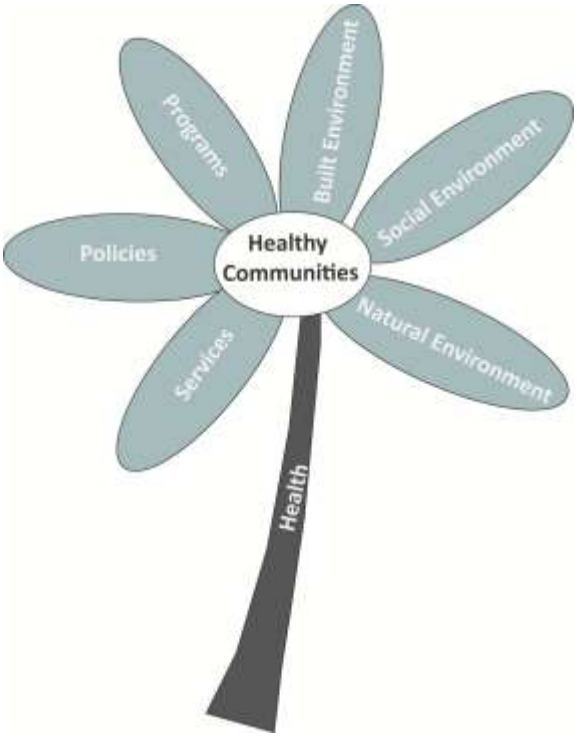

Figure 1: Schematic of health and healthy communities

Figure 1 situates health as the structural concept - the stem that anchors all elements. Sprouting from the foundation of health is the healthy community approach which features several elements. The petals represent some of those elements required for a healthy community, such as health-promoting programs, policies and services. A healthy community includes social and physical environments. Figure 1 presents the physical environment separated into the natural and built environments. The natural environment includes resources such as forests and lakes. The built environment consists of "the buildings, roads, utilities, homes, fixtures, parks and all other man-made entities that form the physical characteristics of a community" (CDC, 2010: online).

1.4 Halifax Regional Municipality

"Halifax Regional Municipality was created in April 1996 as a result of the amalgamation of the cities of Halifax and Dartmouth, the town of Bedford and the municipality of the County of Halifax" (HRM, 2011: online). The amalgamated municipality, bordering the Atlantic coast of Nova Scotia, Canada (Figure 2), covers a land area of approximately 5,500 square kilometres, comprising various landscapes from agricultural and forested areas to a built-up urban core (Statistics Canada, 2006; HRM, 2010). The population reached 403,000 in 2010 (Greater Halifax Partnership, 2011). Almost half the population of the province lives in this amalgamated municipality.

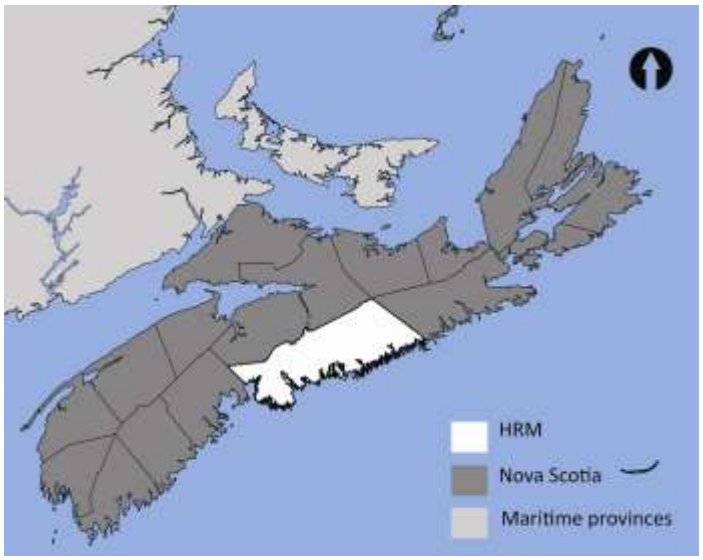

Figure 2: HRM in Maritime provinces
Source: HRM (2011). GIS Data, HRM, DTM NAD 83

HRM grows at a faster rate than other areas of Nova Scotia. The highest growth in HRM took place in the suburban and rural commuter-shed areas. Growth in suburban areas between 1971 and 2001 was 68%, with 74,000 new residents (HRM Planning Services, 2000 referenced by Millward, 2010). According to census data, close to equal numbers of residents lived in either the regional centre or suburbs in 1971 (HRM, 2006). As of 2001, the disparity between these two residential locations was significant, as the suburbs exceeded the regional centre in population. More residents lived in suburban areas in 2001 than other locations such as the regional centre or the rural and rural commuter-shed areas (definitions provided on page 84) (HRM, 2006).

Suburban areas of HRM provide the residential context for large numbers of citizens. Figure 3 shows settlement patterns in HRM, as defined in the Regional Municipal Planning Strategy (Regional Plan). Figure 4 shows the rural, suburban and urban areas of HRM, as defined by the municipality for taxation purposes. The definitions of "suburban" differ between the tax model and the Regional Plan. The tax model expands the geographic area of the urban core significantly from the Regional Plan's boundary. The expanded urban area in the tax model provides greater revenue for the municipality, as urban tax rates are higher than suburban and rural rates. My research project, unlike the Regional Plan and tax model, does not attempt to define the suburbs geographically.

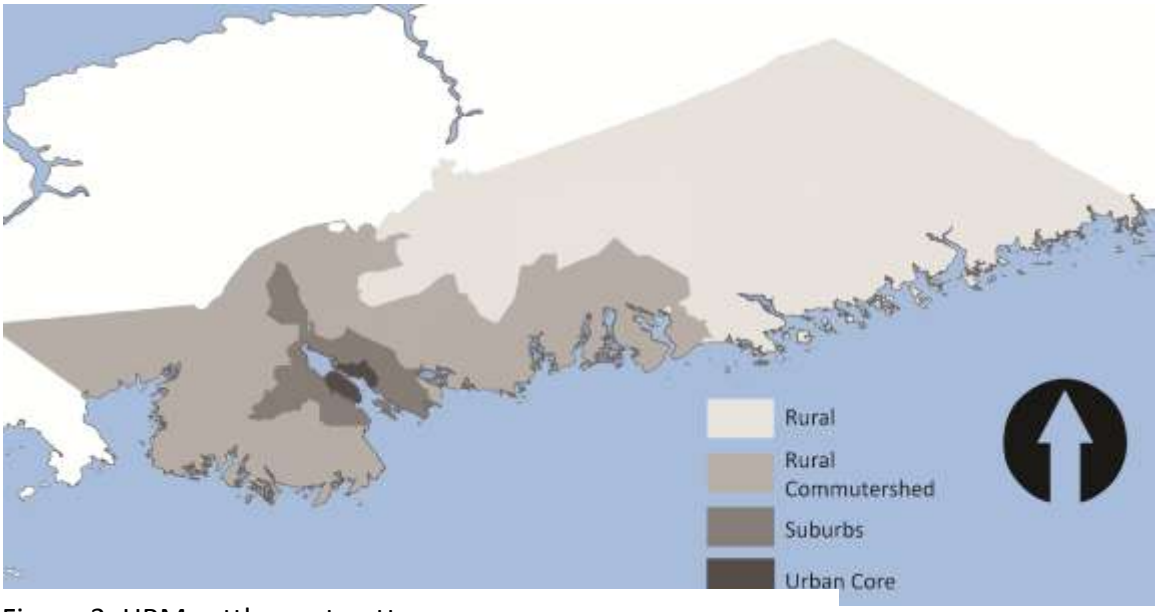

Figure 3: HRM settlement patterns
Source: Regional Municipal Planning Strategy, 2006 (HRM)

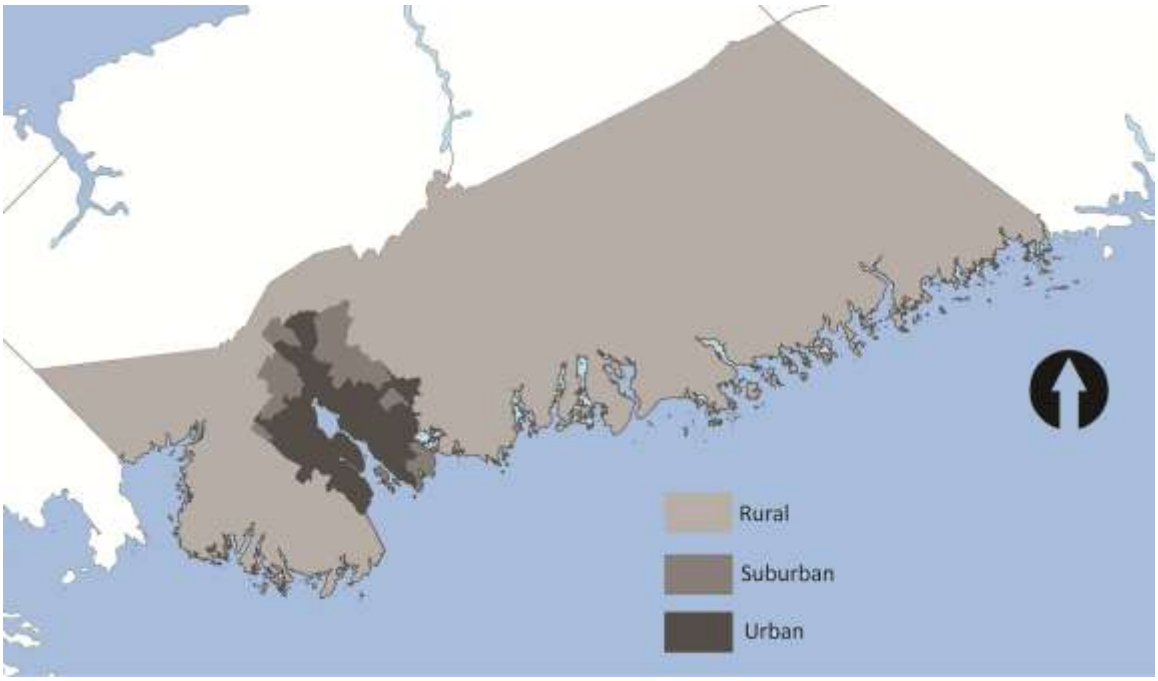

Figure 4: HRM suburbs according to the taxation model
Source: HRM (2011). GIS Data, HRM, DTM NAD 83

1.5 Research Purpose

My research examines how residents, councillors, developers and planners use and interpret the concept of health in suburban residential developments in the Halifax Regional Municipality of Nova Scotia.

1.6 Research Questions

How is the concept of health being used and interpreted in the planning discourse about suburban residential developments in the Halifax Regional Municipality?

My research interest involves exploring how academic theoretical discussions of health and planning are influencing local-level concepts. I want to understand how councillors, developers, planners and residents in HRM discuss health in planning suburban developments. In analyzing the discourse, I hope to inform local planners and health professionals about the current views of health in planning suburban regions. I used the following sub-questions to analyze the data gathered.

1. *How do residents, councillors, developers and planners in HRM interpret the concept of a 'healthy community'?*
    a. *What aspects of health are considered (e.g., physical, mental, spiritual, social)?*
2. *How do respondents discuss 'health' in the context of HRM suburbs?*
    a. *Who mentions it and in what ways?*
    b. *How is it discussed in terms of planning approaches?*
    c. *How is health used in marketing the suburbs?*

2.0 Background

2.1 History of Collaboration between Health and Planning

In the mid-1800s, individuals taking on planning and health roles worked together to improve sanitary and living conditions in industrial cities (Northridge & Sclar, 2003; WHO, 1999). During the mid to late 19th century, the creation of green spaces targeted improvements in physical and mental health (CDC, 2006). By the early 20th century, public health and planning collaboration focused on providing infrastructure to prevent the spread of infectious diseases (CDC, 2006). Zoning provided safety for community residents by separating residential and industrial land uses.

"With the introduction of a better understanding of bacteria, infectious disease and vaccinations, however, the focus of public health shifted away from community engineering and urban design and towards a model based on medical principles" (Duhl and Sanchez, 1999: 1). By the mid-20th century, "the disciplines [of planning and public

health] drifted apart, to a certain extent because of their success in limiting health and safety risks caused by inappropriate mixing of land uses" (CDC, 2006: online). The profession of planning focused on managing traffic for pedestrian safety, removing slum housing areas in cities and providing community members with spacious residential areas (Grant, 2008).

The healthy community movement began in the 1980s in Canada and abroad, corresponding with the emergence of health promotion. The World Health Organization's Healthy Cities project provided an opportunity to implement the organization's health principles, Health for All (WHO, 1997). The adoption of the Ottawa Charter for Health Promotion in 1986 corresponded with the Canadian federal government providing the first of three years of funding for the Canadian Healthy Communities Project (Berlin, 1989). The Canadian Institute of Planners managed the project funding while collaborating with the Canadian Public Health Association and the Federation of Canadian Municipalities. Mathur (1989: 35) suggests that planning had a renewed sense of purpose through the healthy community movement. Grant (2006: 156) notes that "the Healthy Communities project reintroduced the issue of health into the planning vocabulary, and created the framework within which planners could see urban form as contributing to or detracting from public well-being". Federal funding ended in 1989; however, some provinces (e.g., Quebec) continued funding healthy community projects. The concept of healthy communities was soon followed by sustainable development (World Commission on Environment and Development, 1987) and the Government of Canada's *Green Plan in* 1990 (Grant, 2006).

The US Centers for Disease Control and Prevention aided the re-emergence of health and planning collaboration in the past decade by linking obesity and urban sprawl (Kreyling, 2001). Planning organizations began to discuss healthy communities again, with a somewhat narrower scope. In Canada, healthy community planning was reborn through research funding examining the link between the built environment and obesity, provided by the Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research. The Canadian Institute of Planners became re-engaged in 2009, two decades after the original healthy communities project.

> *Within the last decade, there has been a resurgence of opportunities for direct collaboration [between planning and health] nationally, provincially, and locally and, in some cases, a combination of jurisdictional effort and resources. As a result, there is also more awareness about the ways in which collaboration can be possible and its importance in achieving a number of important goals within the fields of planning and health.*
>
> *Clare O'Connor*
> *Principal, Full Picture Public Affairs*

I spoke with several experts in the fields of planning and health to gain their insight on planning's renewed interest in health. I asked for their perspectives on how the professions are collaborating now. David Harrison (personal communication, October 3, 2011), Chair of the CIP Healthy Communities Committee, described health as an emerging trend in planning in recent years. Harrison believes that the health field has led the way for the partnership between planning and health. Harrison also noted that the nature of the collaboration has changed. When planning first emerged in the 19th century, it focused on infectious diseases and outbreaks. The current focus for planning and health shifted from communicable to non-communicable, chronic diseases and conditions such as obesity.

> *… planning became a profession because of a health issue and I think we're right back there, I really do.*
>
> *David Harrison*
> *Chair, Canadian Institute of Planners' Healthy Communities Committee*

> *The health community is absolutely taking the lead, is in the lead, and maybe should always be in the lead.*
>
> *David Harrison*
> *Chair, Canadian Institute of Planners' Healthy Communities Committee*

> *The planning field is now catching up with health on this issue and is proactively engaging in health events, such as the Canadian Public Health Association Conference and the upcoming conference of the Chronic Disease Prevention Alliance of Canada.*
>
> *Alice Miro*
> *Project Manager, Healthy Canada by Design*
> *Heart and Stroke Foundation of Canada*

2.2 Research

Canada helped develop the population health approach which recognizes that several determinants affect health. "Age, sex and heredity are key factors that determine health. The choices we make also matter, but these choices are influenced by environments, experiences, cultures and other factors (the determinants of health)" (PHAC, 2008: 35). Health professionals and others recognized the link between individual health and behaviour, and the surrounding environment for some time. The Ottawa Charter for Health Promotion (WHO, 1986: 2) noted that "the inextricable links between people and their environment constitutes [sic] the basis for a socioecological approach to health". Extensive literature discusses the impact environments have on health. The following section discusses some aspects of this evidence.

Contemporary research focuses on the link between health and community design, namely the link between neighbourhood design and physical activity levels (Frank et al., 2007, 2005; Forsyth et al., 2008; Hoehner, 2005; Williams, 2007). This focus on examining urban design and health comes from concerns over urban sprawl and its

impact. Frank et al. (2005: 117), in their work in Atlanta, Georgia, found "land-use mix, residential density, and intersection density were positively related with number of minutes of moderate physical activity per day". In assessing the role that attitude and preference play in the interaction of physical activity and community design, Frank et al. (2007) found that both attitudinal predisposition for choice of neighbourhood (walkable versus car-dependent) and built form influenced the choice to walk and distance driven. Forsyth et al. (2008) did not find changes to overall physical activity but found that aspects of pedestrian infrastructure (i.e., sidewalks, street lights, traffic calming, shorter blocks) affected time spent walking.

Williams (2007) synthesized evidence from numerous research studies that examined the built environment's relationship to physical activity levels. Williams (2007: 7) found that "despite weaknesses in many of the studies, several characteristics of the built environment are consistently associated with activity in cross-sectional analyses". The built environment characteristics associated with physical activity include "access to parks and open spaces, proximity to destinations, 'walkability' of the community (density, land use mix, street connectivity), availability of sidewalks, and aesthetics of the community" (Williams, 2007: 7). The evidence was not conclusive on urban sprawl and overweight (Williams, 2007). Williams (2007) acknowledged the impact that personal factors and preference have on physical activity levels, while cautioning against over-emphasizing the role the environment plays.

Several studies investigated links between community design and mental health. Evans (2003: 536) noted that "the built environment has direct and indirect effects on mental health". Indirect mental health correlates of the built environment included personal control, social support and restoration (Evans, 2003). Evans (2003) found some direct mental health correlates, namely housing, institutional settings, crowding, noise, indoor air quality and lights. In examining green space, Maas et al. (2006: 587) suggested that "the percentage of green space inside a one kilometre and a three kilometre radius had a significant relation to perceived general health". Individuals of lower socioeconomic status experienced this impact more than others (Maas et al., 2006). Maas et al. (2006) also suggested that the presence of green areas in large cities provided greater benefit to the elderly, youth and individuals with a secondary education.

2.3 Current Initiatives in Health and Planning

The link between community design and health received attention in the past few decades, as evident in academic journals, research funding and community initiatives. In looking for new strategies for combating health issues, health authorities focused on planning as a potential solution.

National-level

The Canadian Institute of Planners (CIP) reorganized its approach to national issues in 2008 and identified five strategic areas. Healthy communities represents one of CIP's

strategic areas (D. Harrison, personal communication, October 3, 2011). CIP established a Healthy Communities Committee chaired by David Harrison, a Nova Scotian planner. The Heart and Stroke Foundation of Canada approached CIP in 2009 to become formally engaged in their *Healthy Canada by Design* project (D. Harrison, personal communication, October 3, 2011). CIP joined that initiative which aligned with their newly established strategic priority. *Healthy Canada by Design* (HCBD), one of the largest ongoing initiatives at the national level, leads research and action on healthy community design by supporting the collaboration of health professionals and planners.

Healthy Canada by Design (HCBD) involves several planning and health stakeholders striving to coordinate and translate pan-Canadian research on healthy built environments and to demonstrate ways that research can be translated into tools and projects (A. Miro, personal communication, October 20, 2011). Partners on this project include the Heart and Stroke Foundation of Canada and CIP, the Urban Public Health Network (composed of medical officers of health from urban areas across Canada), and national health research groups such as the National Collaborating Centre for Healthy Public Policy and numerous individual health authorities (UPHN, 2010). The HCBD project will produce tools, including: "a software tool to evaluate the extent to which proposed developments will promote or hinder health; an analysis of consumer demand for more walkable residential developments; a synthesis of the latest Canadian research on health and the built environment; results of the evaluation of grassroots initiatives to promote green, more walkable neighbourhoods; and evaluation of a training and technical assistance program to support BC UPHN [British Columbia Urban Public Health Network] Health Authorities in promoting healthy built environments" (UPHN, 2010: online).

Prior to *Healthy Canada by Design*, the Heart and Stroke Foundation of Canada (HSFC) focused attention on the built environment for many years. HSFC was one of the initial health organizations championing the issue of healthy built environments. HSFC began in 2005 by releasing a report card on the health of Canadians, specifically addressing urban versus suburban environments and planning implications (HSFC, 2005). A position statement was released in 2007 titled, *The Built Environment, Physical Activity, Heart Disease and Stroke*. Other significant events taking place in 2007 included the policy think tank on obesity (co-hosted by HSFC) and the launch of a joint funding initiative between HSFC and the Canadian Institutes of Health Research (CIHR) on the built environment, obesity and health. Recently, HSFC developed a *Shaping Healthy Active Communities* toolkit for use at the local level.

The Canadian Institute of Planners' recent collaboration with health organizations began years after one of its provincial affiliates, the Ontario Professional Planners' Institute, initiated work in this arena. Harrison (personal communication, October 3, 2011) noted that CIP has re-engaged in health issues only in the last two years. As part of their focus on healthy communities, CIP completed a member survey to find out how members

currently engage in this issue in their local community and what supports might prove useful (D. Harrison, personal communication, October 3, 2011). Survey results are expected shortly. Harrison (personal communication, October 3, 2011) noted that creating healthy communities comes with budgetary considerations.

> *Municipalities are going to be challenged by this, but there's a cost to not doing this stuff. And there's going to be a quantifiable cost to making changes to our built environment, but there's a cost of not doing it.*
>
> *David Harrison*
> *Chair, Canadian Institute of Planners' Healthy Communities Committee*

Numerous conferences and meetings have focused on health and planning. In the past year alone, a Built Environment Policy Dialogue / Workshop took place in Ottawa in March 2011. The CIP annual conference, held in St John's, Newfoundland in July 2011 included health-specific sessions. In October 2011, Vancouver hosted the international Walk21 conference.

> *Walk 21 has only been around for 9 years or so, it only started in early 2000s, and it is largely about planning and I think that it's a really good example of planners and health people coming together to talk about a common issue.*
>
> *Elaine Shelton*
> *Director of Health Promotion, Policy and Research*
> *Heart and Stroke Foundation of Canada (Nova Scotia office)*

Provincial-level

The Nova Scotia Department of Health and Wellness (formerly Department of Health Promotion and Protection) supported initiatives linking health and the built environment for some time. The Active Kids Healthy Kids (AKHK) strategy, aims at increasing child and youth physical activity rates. The AKHK strategy strives for children and youth, and their families, to "have access to safe and convenient natural and built environments for spontaneous and organized play, physical activity, and active transportation" (Government of Nova Scotia, 2011).

The Nova Scotia Planning Directors' Association focused their annual conference (May 2011) theme on the topic of healthy communities. This conference follows seven years after Dalhousie's School of Planning hosted the *Wellness by Design* conference in 2004. Attendance at both conferences was high, demonstrating an interest in planning and health.

In 2007, The Heart and Stroke Foundation of Canada (Nova Scotia office) launched the *Walkabout* program in collaboration with the provincial department of health and the Ecology Action Centre. The *Walkabout* program incorporates the nationally-produced *Shaping Healthy, Active Communities* toolkit as part of its advocacy component. The

Walkabout program's primary focus involves encouraging Nova Scotians to increase their activity levels through walking (E. Shelton, personal communication, October 14, 2011).

Municipal-level

The Nova Scotia office of the Heart and Stroke Foundation of Canada advocates for healthy built environments. In 2004, the Nova Scotia office commissioned the report, *The Cost of Physical Inactivity in Halifax Regional Municipality,* which "documents the connection between health and planning and highlights the potential cost savings - in terms of lives, dollars and productivity - of building healthy, active communities" (Heart and Stroke Foundation of Canada, 2005: online). The Foundation participated as the lone health voice at the table when HRM's Regional Plan was developed in 2006, with Clare O'Connor sitting on the Implementation Working Group (E. Shelton, personal communication, October 14, 2011; C. O'Connor, personal communication, November 1, 2011).

HRM is currently reviewing its Regional Plan, as part of the scheduled five-year review. In response to that review, a coalition of non-governmental organizations formed *Our HRM Alliance*. The Alliance advocates for enhancing the Regional Plan and "…envisions HRM as a collection of vibrant places that protect the environment, foster the health of their citizens and attract sustainable economic opportunities. The Alliance sees HRM as a place people desire to live" (Our HRM Alliance, 2011: online). The Ecology Action Centre (EAC), a member of *Our HRM Alliance*, supports numerous projects linking community design, transportation and health, including the Active and Safe Routes to School and TRAX (Transportation Halifax) projects.

Shelton (personal communication, October 14, 2011) suggests that during the past 8-9 years, a noticeable shift occurred where health promotion efforts moved towards healthy built environments and collaboration of planning and public health. O'Connor agrees that a considerable shift has occurred since 2002-2003 in people's understanding of health and planning links.

> *There seems to be more and more opportunity and willingness for the two groups to work together.*
>
> *Elaine Shelton*
> *Director of Health Promotion, Policy and Research*
> *Heart and Stroke Foundation of Canada (Nova Scotia office)*

I am interested in finding out if high-level policy and research discussions linking health and planning have filtered down and influenced community-level discussions about suburban neighbourhoods. My research will contribute to the overall policy dialogue by assessing the interpretation of the concept of health in planning suburban areas of Halifax Regional Municipality. The findings will inform planners and health professionals about the current discourse on health in the suburban context of HRM, a municipality that is experiencing population growth, especially in suburban areas.

2.4 Changing Demographics

Population changes over time in HRM provide insight into the discussion of health and planning the suburbs. HRM's population was 372,858, according to the 2006 census, an increase of 3.3% since 2001 (2006 Census). The largest age cohort of residents in HRM was between 40 and 49 years old (Census 2006); the median age of the population was 39 (Source: 2006 Community Profiles, Statistics Canada, 2010). In contrast, the largest age cohort of residents in 1951 was children aged 0 to 9 (1951 Census).

As Figures 5 and 6 indicate, the shape of the population pyramids from 1951 and 2006 differ significantly. The 1951 pyramid resembles a true pyramid. Recent data show a constricted population pyramid. The demographic shift to an older population places greater pressure on health care and community services, differing from the 1951 situation which required an emphasis on schools and family services.

Changes in suburban areas reflect the changes in the population profiles. Lower numbers of children and youth reduces the demand for schools. In recent decades, many local schools closed, being replaced by larger schools servicing broader catchment areas. The older demographic has influenced housing options in suburban areas which now feature more condominiums, retirement homes and assisted care facilities for older adults.

The year 1951 offers a stark contrast to 2006 because it marks a point in time before the effects of the baby boom would be felt. Following World War II, auto-centric suburbs begin to appear. The increase in private automobile ownership during the 20th century allowed residents to move further from the downtown core. Suburban developments offered families larger properties at more affordable prices, with ample personal space and proximity to nature.

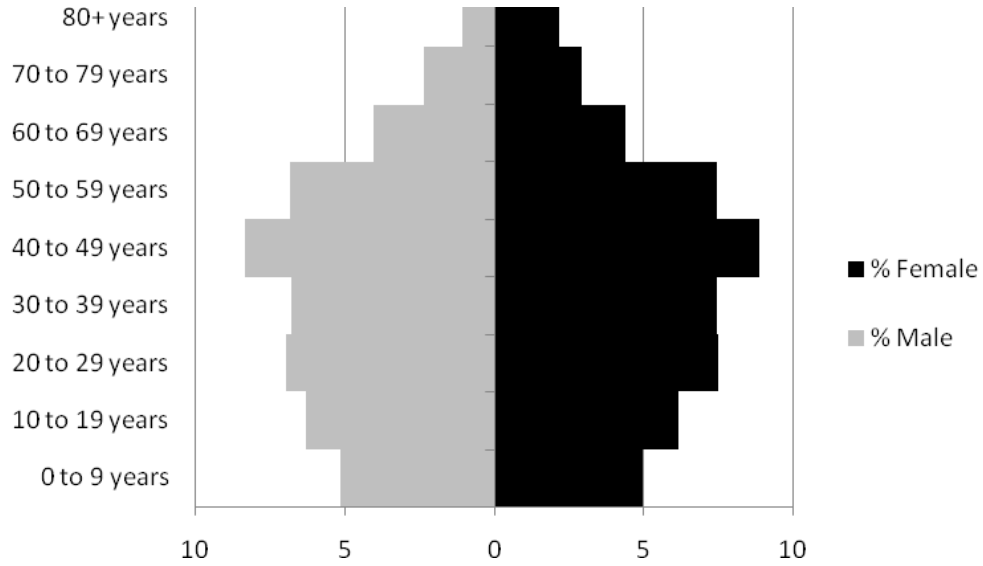

Figure 5: 2006 Population pyramid, HRM (Source: Craswell, 2011; Data Source: Statistics Canada, 2006)

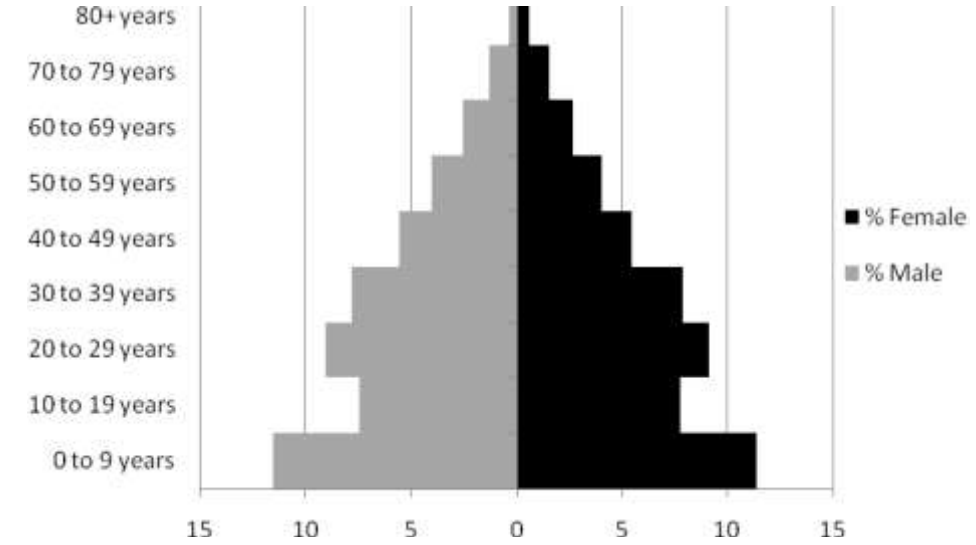

Figure 6: 1951 Population pyramid, Halifax census subdivision/county (Source: Craswell, 2011; Data Source: Dominion Bureau of Statistics, Department of Trade and Commerce, 1951)

The overall population density in 2001 was estimated to be 65.5 people per square kilometre (Nova Scotia Community Counts, 2011). Significant variations in population density exist across the municipality, as demonstrated in Figure 7. Most areas within the urban core of HRM had a population density ranging between 101 and 11,500 people per square km. Population densities are generally lower in areas outside of the urban core (Service Nova Scotia, 2011). However, some suburban corridors have high

densities. Sackville, shown in the north western section of the map below, has population densities ranging between 5,0001 and 10,000 people per square kilometre.

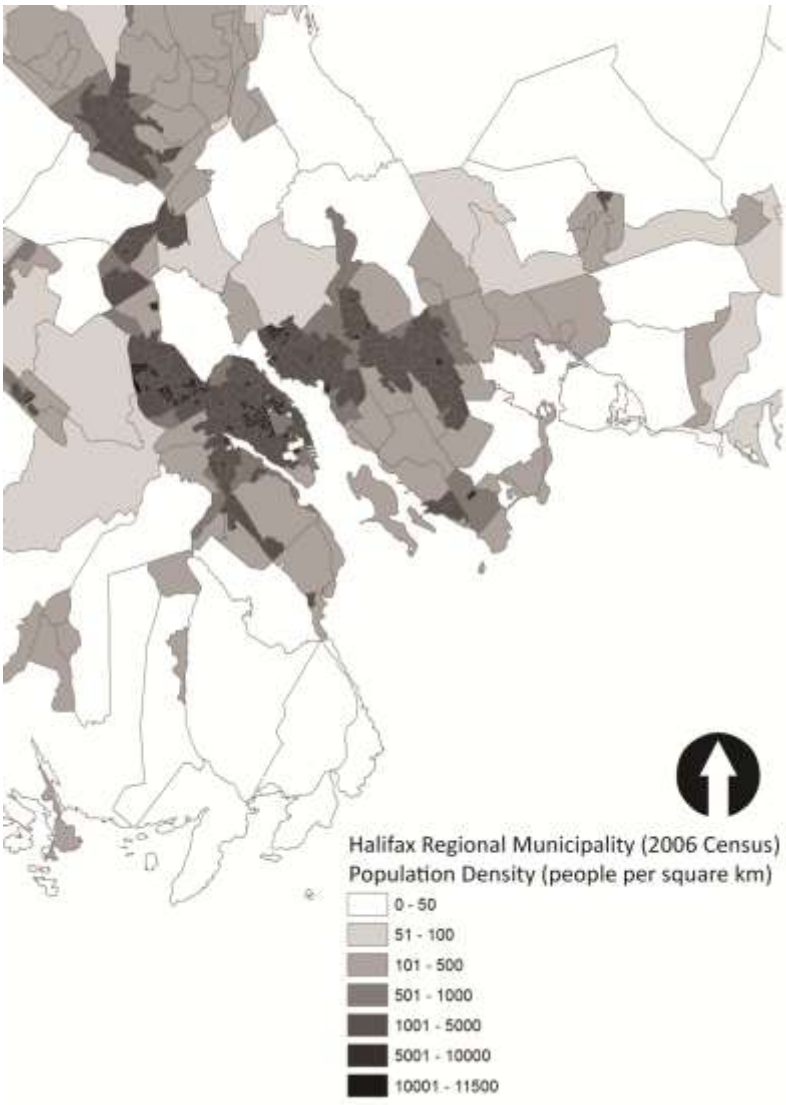

Figure 7: 2006 Population density, HRM
(Source: Craswell, 2011: 6; Data Source: HRM (2011), GIS Data, HRM, DTM NAD)

Current household sizes in HRM are small, with 64% of households comprising 1 or 2 people. The average number of persons in households in 2006 was 2.4 (Community Profiles, 2006), considerably lower than the average in 1951 of 4.2 persons per household (1951 Census). HRM household size was on par with the Nova Scotian (2.4) and Canadian averages (2.5) (Community Profiles, 2006; Statistics Canada, 2010). The trend of an increasing population, combined with decreasing household sizes, boosts the demand for dwelling units. The demand for more dwelling units influenced the development pattern in HRM.

Income levels in HRM are low by Canadian standards, with 68% of individuals earning below $40,000 annually. In comparison, only 53% of Canadians earn below $40,000 annually (2006 Census). In 2006, the median income of individuals 15 years of age and over in HRM was $27,193, with the average income being $35,031 (2006 Census). While HRM income levels are low, the median income is slightly higher than the Canadian average of $25,615 (Statistics Canada, 2007). The two largest income categories - individuals with an annual income of less than $10,000 (20% of HRM population) and individuals with an annual income of between $10,000 and $19,999 (19% of population) - represent 39% of the total earning population (2006 Census). Income and social status influence the health status of residents. "Health status improves at each step up the income and social hierarchy. High income determines living conditions such as safe housing and ability to buy sufficient good food" (PHAC, 2003: online). A significant proportion of HRM residents fall within low income categories, putting them at risk of poor health.

The median monthly cost of rent in HRM in 2006 was $712, exceeding the Canadian average of $671. The average value of owned dwellings ($212,942) in HRM is below the Canadian average of $263,369, but above the Nova Scotia average of $158,000 (Source: 2006 Community Profiles, Statistics Canada, 2010). A majority of homes (64%) were owned in HRM in 2006. Housing tenure rates differed significantly between urban and suburban areas. In suburban areas in 2001, 65% of residents owned their homes, compared to 37% of urban residents (2001 Census, as noted by HRM, 2004). More affordable housing in suburban areas supports residents in purchasing homes. High home ownership rates also suggest suburban incomes are likely above the municipal median income. Income and social status affect the level of control individuals have over their lives, including housing options.

The primary mode of transportation to work in HRM is as the driver of a private automobile, at 65% of commuters (2006 Census). Place of residence greatly impacts the mode of travel to work. The most prominent mode of transportation to work for suburban residents is as the driver of a vehicle (67%), where residents in the urban core walk or use a bicycle (44%) (Statistics Canada, 2001 Journey-to-Work Data; HRM Planning Services, 2004). Commuting daily by vehicle increases the amount of time suburban residents are sedentary in comparison with their urban counterparts.

In summary, HRM's population is moderately increasing while household sizes have decreased over time. Smaller household sizes combined with population growth translate into higher numbers of residential dwellings. The aging of the population also impacts residential dwellings, with greater variety offered as suburban housing options. These changes occurred while an increasing number of residents chose to live in suburban areas. These factors shaped the development pattern of suburban areas of the municipality.

2.5 Development Trends

Development patterns in Halifax have not followed typical Canadian development patterns, largely because of topographic constraints and policy direction. Rapid residential expansion of areas within commuting distance to the urban core began in the 1960s due to a combination of undeveloped peripheral areas not suited to resource-based industries, low land prices, and increased automobile use (Millward, 2002). Many HRM suburbs are spatially distributed around three focal communities: Halifax, Dartmouth and Bedford. Former municipal policies played a role in this development pattern.

"Leapfrogging suburban development was actively encouraged by the 1963 advisory regional plan (Millward, 2002b), which relieved overcrowded housing conditions in the urban core by means of low-density planned communities, sited on glacial till to reduce development costs" (Millward, 2006: 482). Favourable surficial geology led development to be encouraged in the suburban communities of Cole Harbour and Lower Sackville (Millward, 2006). In 1975, the Regional Development Plan (RDP) supported continued development in those areas and added the communities of Eastern Passage and Bedford as development sites, with all four communities served by central sewer and water (Millward, 2006). The Regional Development Plan called for a development boundary, but it was not enforced. "The central portion of the Halifax region has been strongly shaped by the RDP over a period of 30 years, and its legacy is still embedded in current planning strategies (municipal plans) and land use by-laws (zoning codes)" (Millward, 2002: 39).

In the 1980s, government discontinued regional planning and development moved from a focus on suburban satellite communities to large-lot developments outside of serviced areas (Millward, 2002). Regional planning began again in 2001, with the Regional Plan endorsed by HRM Council in August 2006. Millward (2002: 45) summarized development of the Halifax region by noting, "with little agricultural capability, extremely low land costs, and minimal planning controls, the peripheral commuter belt of Halifax-Dartmouth has experienced considerable suburban and exurban development over the last 40 years, in response to rising car-ownership and improved roads".

Policies in HRM led to sprawling development located far from the urban core. Increasing car ownership aided this development pattern. The compact urban form that predominated in the 1950s allowed residents to walk to work, and children to walk to school. The subsequent sprawling development pattern resulted in automobiles as the predominant mode of transport. A shift from active daily travel patterns of the '50s to today's reliance on motorized transportation affects population health.

3.0 Methods

3.1 Approach

My research is exploratory and descriptive, using qualitative research methods. The goal of an exploratory researcher "is to formulate more precise questions that future research can answer" (Neuman, 2000: 21). Case study research design and methods proposed by Yin (2003) guided my research strategy. Yin (2003: 1) suggests that "case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context". The strength of case studies lies in their "ability to deal with a full variety of evidence - documents, artifacts, interviews, and observations…" (Yin, 2003: 8).

While case studies do not allow generalizing results to populations, they do permit generalizing to theory (Yin, 2003). Through my analysis, I attempted to develop theoretical explanations based on the findings. Glaser and Strauss' (1967) grounded theory approach informs my approach to theory building. They suggest the creation of a theoretical framework based on the evidence. Current collaborative activities of health and planning provided context for my work; however, they did not provide the themes or sub-themes for my data analysis. Instead, I used a thematic analysis approach that is loosely based on grounded theory. The thematic analysis allows themes to emerge from the data. My case study contributes to the planning and health literature by examining the way people conceptualize health in planning the suburbs.

Neuman (2000) suggests that qualitative research uses many forms of evidence. Creswell (2009) lists four types of qualitative data collection: observations, interviews, documents and audio-visual materials. Yin (2003) identifies six commonly used sources of evidence for case studies - documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts. My research uses four types or sources of evidence (Creswell, 2009; Yin, 2003) in the following manner:

1. **Interviews**: Face-to-face, semi-structured interviews took place in June and July 2011 with residents, planners, councillors and developers in HRM. Interviews typically lasted between 40 to 60 minutes and focused on interviewees' perspectives on development trends in suburban HRM. Prior to conducting interviews, I received training from Professor Grant on qualitative interviewing techniques and skills. I recorded each interview using a digital recorder and took hand-written notes. In total, I conducted 25 interviews with 26 individuals.

   I asked respondents questions concerning suburban trends in HRM generally, along with some questions specific to new suburban developments. I encouraged interviewees to define suburbs according to their personal interpretation of the concept. The areas described as suburban varied according to the interviewee. I

asked residents to describe the extent to which their communities were healthy communities. I encouraged both residents and decision-makers to speak about their personal views of healthy communities and/or health.

The highlighted text in Appendices 1 and 2 indicates all additions to the interview guides specific to my research. Appendix 3 details my sampling approach. Table 1 provides a breakdown of interviewees according to category and gender.

Table 1: Summary of interviewees

Respondents	Total	Male	Female
Planners (Municipal)	4	4	0
Planners (Private Consultants)	3	1	2
Development Officers (Municipal)	5	2	3
Councillors	6	2	4
Developers	4	3	1
Residents	4	2	2
Total	**26**	**14**	**12**

2. **Expert consultations**: Consultations took place in October and November 2011 with individuals through in-person meetings and telephone calls. I consulted experts to understand the broader context of collaboration between health and planning at the national-, provincial- and municipal-level. I met with three experts in person and conducted one telephone interview, including:
   - David Harrison, a local planner and Chair of the Canadian Institute of Planner's national Healthy Communities Committee;
   - Elaine Shelton, Director of Health Promotion, Policy and Research at the Heart and Stroke Foundation of Canada, Nova Scotia office;
   - Alice Miro, Project Manager of the *Healthy Canada by Design (HCBD)* project; and
   - Clare O'Connor, a private consultant in HRM who previously worked with the Heart and Stroke Foundation of Canada, Nova Scotia office.

3. **Document review and documentation**: I reviewed census data, articles on development trends for the area, planning policy documents, and promotional marketing materials (of developers, builders and realtors). I used census data to prepare a demographic profile of HRM residents. Articles on development trends contextualized the development history of the region. I analyzed planning policy documents and promotional marketing materials of realtors and developers to see where and how health appears. The document review focused on identifying themes and understanding the broader context of collaboration on planning and health. Reviewing local planning policy documents allowed comparison of national trends and themes to the local context of HRM.

4. **Visual materials**: Direct observations and photographs were taken between June and August 2011 during the visual field survey process, as part of the *Planning and Inhabiting the Suburbs* project. I targeted a mix of older and newer suburbs for field surveys. Suburban areas studied in the field surveys do not necessarily match the place of residence or work of interviewees. Observations and images taken during the field surveys substantiated some of the themes identified in the interviews. Please see Appendix 4 for the field survey template used in gathering observational findings.

Table 2 summarizes the types of evidence I used and their corresponding sources. Figure 8 demonstrates a visual schematic of the research approach.

Table 2: Summary of evidence types and sources

Evidence Type	Sources
Interviews	• Semi-structured interviews with research subjects
Expert consultations	• Semi-structured consultative interviews with experts
Document review	• Census data • Academic literature on development trends • HRM planning policy documents • Realtor and developer/builder marketing materials
Visual materials	• Photographs • Maps

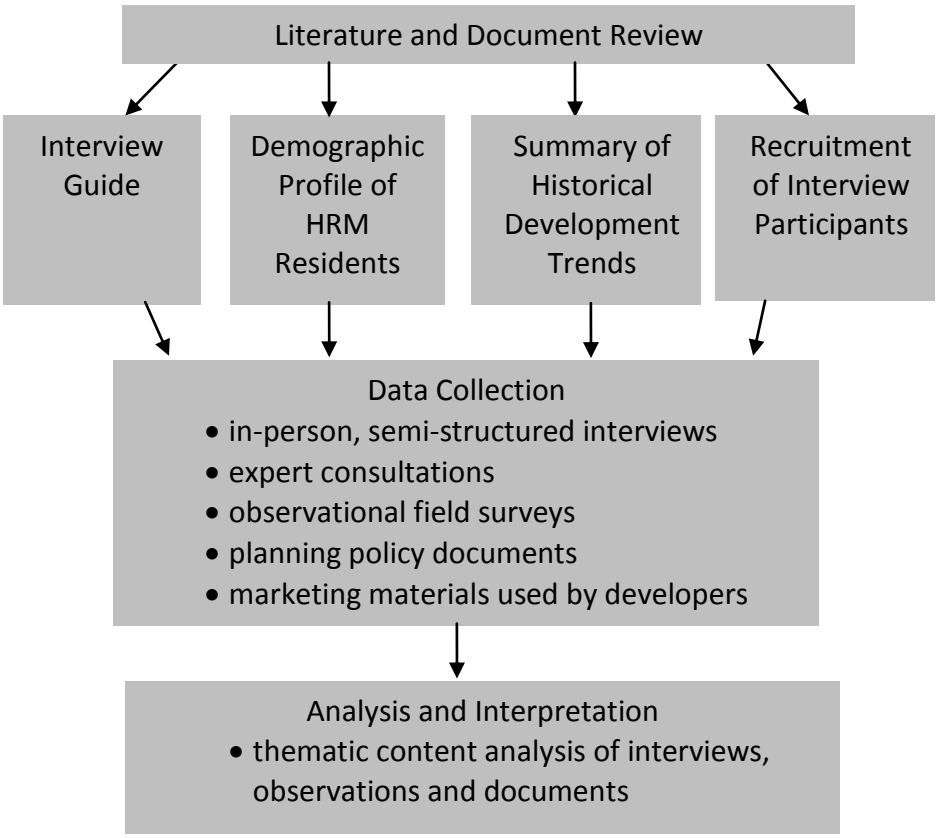

Figure 8: Schematic of research approach

Table 3 specifies the research methods used to answer the research sub-questions. Analysis focused primarily on the interview transcripts. The policy documents, expert consultations, field survey notes and marketing materials provided useful context for my second sub-question.

Table 3: Summary of research questions and methods

Research Questions	Methods
<u>Overall</u> How is the concept of health being used and interpreted in the planning discourse about suburban residential developments in the Halifax Regional Municipality?	
1. How do residents, councillors, developers and planners in HRM interpret the concept of a healthy community? a) What aspects of health are considered (e.g., physical, mental, spiritual, social)?	• Interviews (decision-makers) • Interviews (residents)
2. How do respondents discuss health in the context of HRM suburbs? a) Who mentions it and in what ways?	• Interviews (decision-makers) • Review of policy

Research Questions	Methods
b) How is it discussed in terms of planning approaches? c) How is health used in marketing the suburbs?	documents and marketing materials produced by developers/realtors

3.2 Analysis and Interpretation

My research follows qualitative research processes for data analysis and interpretation suggested by Creswell (2009) and Yin (2003). I edited the transcripts of each interview and reviewed them for references to health. I compiled all health-related statements into an evidence bank document - a condensed version of only relevant information for the purposes of my research. I then reviewed the data in the evidence bank and manually coded it (using a colour coding scheme) for themes that emerged, using a thematic analysis approach. Thematic analysis involves finding common inter-related themes among the interviews, along with diverging and converging views. The thematic analysis approach allows themes to emerge somewhat unprompted; however, the interview questions provided an initial framework of topics. I found 17 broad themes, with various sub-themes.

My analysis compares the similarities and differences in responses of the three groups in the decision-maker category (planner, developer, councillor) regarding health and the suburbs. The final step of analysis involved interpreting the meaning of themes and framing these in the context of the academic discourse and community initiatives (Creswell, 2009). I summarized and presented my interpretation of findings as a case study of HRM. I followed principles suggested by Yin (2003) in my data analysis, including: use multiple sources of relevant evidence; consider other potential interpretations; focus analysis on the main theme of the case study; and include the researcher's existing knowledge.

3.3 Limitations

The sampling method was purposive, looking for particular categories of respondents. The sample was then convenience based and used the snowballing technique (asking respondents for further referrals). A limitation of the project is the sample size of HRM residents. I recognize that a sample of four residents, who were familiar to me, is not representative of HRM residents, nor is it proportional to the other categories of interviewees. However, my research is exploratory and is not attempting to obtain a representative sample. While the sample of residents is small compared to HRM's overall population, residents are an important group whose perspective needs to be reflected in the research, even in a limited manner. Another limitation is the self-selection of people willing to be interviewed; only those interested in the issue agreed to participate.

4.0 Findings

4.1 Planning Policy Documents

The Municipal Government Act (MGA) describes the provincial legislative mandate and enables municipal land use planning (Halifax Regional Municipality, 2006). The MGA establishes planning and development procedures for municipalities and sets provincial standards for planning tools such as planning strategies, by-laws, development agreements, and comprehensive development districts, ensuring that procedures are consistent province-wide (Province of Nova Scotia, 1998).

HRM's Regional Municipal Planning Strategy (Regional Plan) outlines the municipality's approach to land use (Halifax Regional Municipality, 2006). Council approved the Regional Plan in 2006. The Plan provides a twenty-five year planning horizon. The first review of the Plan is underway, as per the established five-year review cycle.

The Regional Plan contains an overall vision, principles, and goals that provide the framework for subsequent policy statements. It emphasizes the need for managing growth in the municipality, to ensure financial and environmental resources are preserved (Halifax Regional Municipality, 2006).

> *HRM's vision for the future is to maintain and enhance our quality of life by fostering the growth of healthy and vibrant communities, a strong and diverse economy, and sustainable environment.*
>
> *Halifax Regional Municipality, 2006*

The Regional Plan describes a vision of healthy, vibrant and sustainable communities (HRM, 2006). Health is mentioned in numerous ways, referring to the health of the natural environment and ecosystem, water and air quality, the economy, and local communities. This suggests that health is considered broadly, mirroring the perspective of the healthy communities movement.

As one of its principles, the Regional Plan "manages development to make the most effective use of land, energy, infrastructure, public services and facilities and considers healthy lifestyles" (HRM, 2006: 12). The Settlement and Housing chapter focuses on the health of residents and describes policy that supports walkable and bicycle-friendly communities (HRM, 2006). "Community planning that provides for safe and walkable communities, sidewalks, biking paths and easy access to transit has the potential to reduce the human and economic burden of physical inactivity and to improve the health of HRM residents" (HRM, 2006: 42).

The Regional Plan goes beyond personal health practices, such as physical activity, to consider the determinants of health, including income and social status. It acknowledges that "opportunities for safe, affordable and accessible housing are

integral to the health of residents but these opportunities do not equally exist in all neighbourhoods" (HRM, 2006: 58). In general, the acknowledgement of ecosystem health, personal health, and economic and equity issues of housing point to a healthy community focus, even though not explicitly stated.

> *Active Transportation Vision*
>
> *Develop a region-wide, visible and connected Active Transportation network of on-road and off-road facilities that are convenient, accommodate the needs of existing and future users and promotes an increase in non-motorized vehicle travel, particularly for short distance trips. This network will be supported by various programs, policies and strategies that will help and encourage Active Transportation year-round, and improve the quality of life for both residents and visitors to the area and make HRM one of the most desirable municipalities in which to live, work and visit in North America.*
>
> *Halifax Regional Municipality, 2006*

Numerous functional plans stem from the Regional Plan, including an active transportation functional plan. HRM's Active Transportation Plan was approved in principle by council in November 2006. HRM (2006) categorizes active transportation as active commuting, active workplace travel, active destination oriented trips and active recreation. Recreation is rarely included in definitions of active transportation; however its inclusion here acknowledges that active transportation infrastructure (e.g., trails, sidewalks, paths) is often used for both utilitarian and recreational purposes. HRM formally recognizes a municipal role in supporting healthy citizens through land use, and infrastructure planning and design.

4.2 Field Surveys

The form of suburban development varies significantly across the municipality. Many older suburban developments follow common patterns of predominantly single detached dwellings with large frontages and setbacks from the street. In contrast, I visited a private condominium townhouse community (developed in the past decade) which features multiple dwelling types clustered together with shallow setbacks from a private driveway. I saw few sidewalks in the suburban developments I visited during the field surveys.

Figure 9: Private townhouse condominium community

During the visual field surveys of HRM suburbs, I found both informal and formal trail networks. Active transportation and recreational infrastructure such as trails and sidewalks are a significant theme in the interviews.

Figure 10: Informal suburban trail

Figure 11: Formal suburban trail

I found parks and playgrounds in every development, but the scale and complexity varied according to the location (see Figure 12). Playgrounds and small neighbourhood pocket parks tended to focus on activities for young families, with play structures the predominant physical structures provided.

Figure 12: Variations in parks and playgrounds

4.3 Marketing Materials

Health as a theme was not overt in real estate marketing. Realtors tended to focus their promotions on the dwelling more than the surrounding community. Realtors promoted community features such as nearby beaches, parks, water views, commuting distance to downtown, and community amenities such as schools. One realtor in the Eastern Passage area promoted the amount of open space that would remain in the subdivision. In another suburban development, a realtor described the development as having "space to breathe".

Developers tend to focus more on the community and its amenities in their marketing approach. Marketing themes align with many themes discussed in the interviews - whole and complete communities, environmental focus, parks and green space, active transportation, recreation, personal health, safety and transit. A common theme in marketing materials for suburban developments is the promise of the "best of both worlds", suggesting country living close to the urban amenities of downtown HRM. Developers also focus marketing efforts on providing everything that a home owner could want. In the Parks of West Bedford, the promotional tag line is "It's all here" (West Bedford Holdings Ltd, 2010: online). West Bedford Holdings Ltd (2010: online) suggests "finally, a place where you can live, work and play…".

Developers heavily promoted active transportation and recreational opportunities, mentioning trails, paths, greenways and walkways. One developer in Eastern Passage included the "walk score" of their development in their marketing materials. The score was very low (17 out of 100) and described the area as car-dependent. Including the walk score in promoting the property highlights the auto-orientation of the community. The developer does not view car dependency as a deterrent.

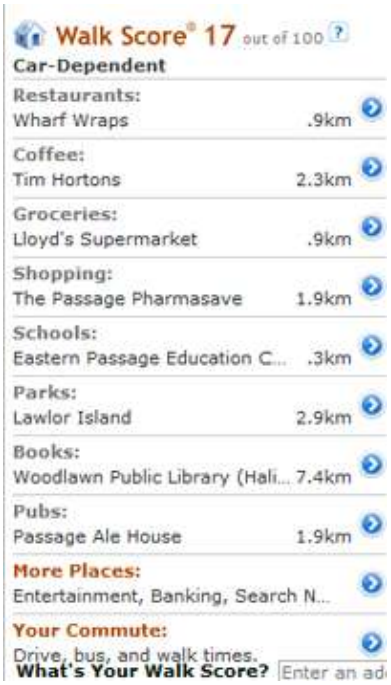

Figure 13: Walk score of HRM suburban development

Developers heavily marketed nature, parks and green space. Armco Communities developed the Kingswood on the Lakes and Kingswood North developments located off Hammonds Plains Road. These are expensive developments comprised exclusively of single detached units. The newly developing Kingswood North tag line promotes the development by stating "where you can't see the city for the trees". The images chosen for the development's information sheet speak to the target audience. These dream homes are likely to attract an older population based on the unit price. Restrictive covenants control dwelling size in this development, providing a minimum allowed square footage (Armco Communities, 2005). The wooded road featured as the central image in Figure 14 corresponds to the marketing of the development as "gracious country living" (Armco Communities, 2011: online). The marketing of this development suggests restorative, healthy features such as a controlled environment (secured through covenants), clean air and nature can be provided through suburban living.

Figure 14: Kingswood North promotional materials
Source: Armco Communities, 2011

4.4 Interviews

In reviewing evidence from the interviews, I identified 17 broad themes mentioned by respondents.

1. Environmental focus - natural (including air quality); buildings (including mould)
2. Community design - auto-centric; urban design; density; child-friendly; siting of schools, libraries
3. Political support
4. Staff support - collaboration with others
5. Public support - resident attitudes; civic engagement
6. Implementation of policy and regulations - financial constraints
7. Whole and complete communities - community well-being; sense of belonging; mixed use; commercial
8. Safety
9. Affordable housing and shelter
10. Transit
11. Personal health - healthy eating and food; physical activity; mental health; obesity; disabilities
12. Determinants of health - gender; health services
13. Recreation - infrastructure; facilities; affordable physical activity opportunities
14. Active transportation - infrastructure; attractive environment for active transportation; policy; bikes; walking and walkability
15. Healthy communities
16. Demographic shifts - aging in place
17. Parks and green space

I prepared tables of the interview themes and compared each theme to health aspects mentioned in the literature and marketing materials promoting HRM suburbs.

Is health part of the discussion of planning the suburbs of HRM?

When I asked decision-makers the extent to which health is discussed in planning the suburbs of HRM, many respondents asked me to clarify what I meant by health or healthy communities. The uncertainty of respondents on what is meant by health suggests that respondents do not regularly discuss health as part of planning issues. It implies that health may not be as well understood or commonly discussed as other planning concepts.

Who mentions it and how?

I encouraged respondents to use a definition of health that was meaningful to them. If pressed, I would refer to the World Health Organization's definition. Once clarified, decision-makers generally thought that health was part of the discussion of planning suburban HRM. Responses varied according to the role of the respondent: planner, developer or councillor.

Developers were split on whether or not health was part of the planning discussion. Interestingly, the background of the developer might have impacted his or her response. For developers with a background in business, the respondents suggested health had a non-existent or minimal role. Developers with more extensive backgrounds in planning saw the link between planning and health.

One developer initially interpreted the question to be about dialogue and the planning process. That developer felt that healthy dialogue in planning is needed and important amongst stakeholders, but went on to say that health is not discussed. Another developer spoke of the importance of walking trails, access to transportation and recreation facilities, considering health in the suburbs as allowing for human movement. Two developers had opposing views, with one developer suggesting that health is important and the other developer suggesting he or she had never heard health mentioned in planning discussions.

Somewhat surprisingly, frustration at the lack of political will to support the downtown core was raised by one developer in response to the question of health's role in planning. Some developers recognized that community design elements such as school siting and employment centres within the suburban areas of HRM impacted health, possibly suggesting an association of health with urban vitality or economic strength.

Councillors were divided on the extent to which they felt health is part of planning the suburbs. Councillors who felt health was not part of the current discussion either thought it should be because it is important, or felt it was only paid lip service. Councillors who felt health was part of the planning process tended to focus on physical infrastructure or community design elements: parks, green space, and recreation facilities. They clearly saw active transportation and the walkability of communities as part of the discourse. Interestingly, one councillor, when asked about the role of health in planning, spoke of the role of developers in building developments that can accommodate residents with illnesses or disabilities. The respondent discussed illness, rather than viewing health holistically as others had.

When asked if health is part of planning the suburbs…

It has to be.

Councillor

So I think health is a huge issue but we haven't made those connections.

Councillor

You know, if you can live where you work, and if we can make it attractive for you to walk to work or bike to work, then we need to move in that direction.

Councillor

Planners in HRM talked about health becoming a new trend and spoke of it increasingly gaining support and traction. The health messages have clearly reached planning staff, and at least one member of council, who spoke of the potential that spending on health-promoting infrastructure now would save money down the road in health care services. Planners also spoke of the benefits active transportation provides individuals in fitting physical activity into their daily routines. These are common messages from the field of health promotion and their retention by planners suggests the impact health professionals are having on the planning field.

> *So, in a nutshell, I think the whole aspect of public health is really, really important, and just needs to, again, be part of that language culture for us as planners.*
>
> *Planner*

Planners who work for the municipality spoke of health reaching policy in terms of active transportation. Planners working in the private sector had a more cynical impression, stating that health may be in policy statements, but it is not translating into anything concrete. When planners spoke of health, they focused on the support system of trails and walkways, and walkable communities. Many tied active transportation to affordable physical activity opportunities and promotion of healthy lifestyles.

What are the most common themes? How are they discussed?

Interviewee responses covered seventeen broad themes. The most relevant findings are discussed, providing an understanding of decision-maker and resident views on health in planning the suburbs.

Active transportation

Respondents mentioned active transportation most often and in greatest detail when discussing health and healthy communities. Respondents clearly saw community design's effect on suburban residents' abilities to travel through their community by walking or bicycling. Sub-themes mentioned include infrastructure components such as sidewalks, trails, paths, maintenance of sidewalks, and length of crossing signals for pedestrians at intersections. One planner expanded this to include end of trip facilities such as bike racks and employer facilities for employees commuting by bike to work. Many respondents tied the walkability of neighbourhoods to the concept of complete, whole communities, recognizing the impact that location of public institutions has on walkability.

Table 4: Active transportation

Interview themes	**Literature** [1, 2]	**Marketing materials**[3]
Active transportation	- adequate access to food, water, shelter, income, safety, work and recreation for all[1]	
- bikes - walking and walkability	- increasing pedestrian and cycling connectivity[2]	- hopping on a bike and riding a trail[3] - walking with the kids through hardwood ridges[3]
- policy		- encourages foot traffic
- infrastructure		- paths - trails - walkways
- attractive environment for active transportation		- connected greenways[3]

Councillors frequently mentioned sidewalks, bikes and bike lanes when describing the role health plays in planning suburban HRM. Most councillors supported active transportation and felt that council in general supported it. However, one councillor believed that staff were more supportive and believed in active transportation more than council members did.

> *Council, I think the majority of them want something that's walkable…and I think all of them want that. And because it's practical and it's smart to do that, and it encourages people to walk and look around.*
>
> *Councillor*

Several councillors spoke of progress being made on active transportation infrastructure but noted that "there is still a long ways to go". Councillors acknowledged that active transportation policies exist in the municipality, but progress is slow in policy implementation. Budgetary constraints block progress to creating active transportation infrastructure. One councillor described the struggle to find money for active transportation in HRM's budget. Another councillor spoke of the lack of room on some existing streets for retro-fitting, but noted that new subdivisions would offer greater potential for bike lanes.

One councillor described "the love affair with the car" as a long-term challenge to planning and developing sustainable communities. Several councillors spoke of

[1] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.
[2] Heart and Stroke Foundation of Canada. (2010). *Shaping active, healthy communities.*
[3] West Bedford Holdings Ltd. (2010).

generational issues as a constraint to active transportation as a mode of transport in HRM. Conditions suggested as affecting active transportation include the aging population and baby boom generation, along with topography, existing road width, and climate.

Developers described the desire of residents to have walking trails and sidewalks in their communities. Developers did not discuss bike infrastructure, whereas planners and councillors focused more on bike infrastructure. Developers viewed walking trails as integral to new suburban communities, with sidewalks, multi-use trails and trails through the forest forming the active transportation infrastructure. The ability of residents to walk and move through their community represents an important feature of healthy communities according to developers. Some developers spoke of the need for planning to be a win-win situation. One developer described walking paths linking cul-de-sacs to neighbouring streets as a win-win for connectivity and logistical reasons, making it health promoting infrastructure that serves a dual purpose.

> *…the number one amenity that people look for in our master planned communities - walking trails.*
>
> *Developer*

> *So I guess my point is active transportation is a really key component of health.*
>
> *Developer*

Figure 15: Walking trail at end of cul-de-sac

> *So if you build a cul-de-sac, the water has to loop to another service. So a lot of the time you'll see cul-de-sacs, they'll have a walking trail within the cul-de-sac. It's not really a walking trail. That's just an accident. It's a water line underneath it because that cul-de-sac needs another source... So it's really a water line, and they just pave over a walking trail. And a lot of them you'll see a little bit wider. And that's for emergency vehicles, so the emergency vehicles can also get through the end of the cul-de-sac. So they play multiple roles, those trails at the end.*
>
> *Developer*

Planners focused more on active transportation infrastructure, and planning's impact on physical activity levels and health care spending. This viewpoint aligns with the current approach of community initiatives aimed at health, obesity and the built environment. Several planners spoke of the need for public education and engagement to gain support for active transportation, specifically bike lanes. They tied public support and active transportation closely together; likely due to setbacks such as the Herring Cove Road bike lane project's unexpected public and business opposition*.

> *…and if the infrastructure is set up in a manner that it doesn't encourage safe, active transportation, then your alternatives are you drive your own car, you carpool, you take public transit, but all of those are sedentary, right? They're not burning calories, they're not getting you active. It's the other alternatives that would do that.*
>
> *Planner*

Planners discussed bike lanes and cycling infrastructure, such as bike racks and end of trip facilities, when describing active transportation. Planners repeatedly mentioned active transportation infrastructure (specifically walking trails and biking lanes). Many planners spoke of HRM policy now supporting active transportation, with it showing up in regulations (e.g., bike rack requirements).

Personal health

Respondents mentioned the personal health of individuals or populations, but not to the extent expected. Respondents mentioned physical activity often, which aligns with the academic literature and complements active transportation. Surprisingly, respondents rarely mentioned obesity.

* Herring Cove Road is located in the Halifax Regional Municipality. A recent proposal (in 2010) to create a bike lane as part of road improvements met with opposition and HRM Council voted against the project.

Table 5: Personal health

Interview themes	**Literature**[4,5,6, 7]	**Marketing materials**[8]
Personal health - Disabilities - Mental health - Obesity - Physical activity - Healthy eating and food	– adequate access to health care services[6] – high health status (high levels of positive health and low levels of disease)[4] – adequate access to food, water, shelter, income, safety, work and recreation for all[8] – meeting of basic needs (food, water, shelter, income, safety and work) for all the city's people[4] – promote physical activity, healthy eating[7] – opportunities for healthy active lifestyles (especially regular exercise)[5] – opportunities for local food production and healthy food outlets[5]	- outdoor lifestyle - lifestyle communities - provision of a healthy, viable lifestyle[8] - encouraging a healthy, active lifestyle

Councillors mentioned sub-themes such as physical activity, mental health, disabilities, and healthy eating. One councillor described the importance of nature and natural settings for residents' mental health. This councillor was originally from a rural area, potentially influencing the response based on personal experiences. Councillors discussed healthy eating in terms of agricultural lands being developed for suburban residential developments. One councillor referred to the development of Cole Harbour years ago, a formerly productive agricultural region. Another councillor highlighted the need for cities to grow their own food to ease transportation issues and to re-connect residents with food production. Accessible communities were mentioned for two reasons: to provide a community that allows residents to connect with neighbours and for residents with disabilities. Councillors rarely discussed physical activity. Councillors who mentioned physical activity linked it with active transportation and whole and complete communities.

Developers did not focus on personal health issues to any great extent. One developer suggested that residents want to be able to garden and raise chickens. Many developers spoke of residents' desires to walk and having walking trails. One developer discussed mental health, describing long commutes as promoting not only obesity, but also stress.

[4] World Health Organization. (2011). *Health city checklist*.
[5] World Health Organization, Europe. (2005). *Bursa statement.*
[6] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.
[7] Urban Public Health Network. (2010). *Healthy Canada by design.*
[8] West Bedford Holdings Ltd. (2010).

Obesity was not a focus for planners. In fact, only two planners mentioned obesity when describing personal health. Among all decision-makers, planners mentioned physical activity most often. Planners spoke of "active living" and "active lifestyle communities" often, and the importance of "healthy lifestyles" for residents. One planner described "healthy lifestyles" as becoming engrained in the consciousness of the public and the planning profession. Two planners mentioned the link between providing infrastructure, such as walking trails, and increasing physical activity. They touched on the idea that building infrastructure will result in residents using it. Planners spoke of how well used some of these established trails are.

> *I think there's a fairly good support system for trails, walkways. And I think the idea of getting out and getting some exercise is being pushed way more than it was, let's say ten years ago. So I think that is needling its way in almost through the back door. But when the trails start appearing and you see people using them, you think, oh my gosh, it's working.*
>
> *Planner*

Several planners discussed urban gardening and gardens for families. One planner described this trend as a "change in mindset" for residents. Planners working in the private sector tended to focus more on the psychological benefits of the suburbs. They spoke of residents being happy in the suburbs and having some control over their environment because they've "created a place for themselves". One private sector planner described how the sense of space provided in suburban developments ties to emotional health for many suburbanites. This planner hailed from a rural area which likely influenced the viewpoint.

> *I think there's a little bit more of an urban gardening thing going on. It seems to be people have an interest in that…people are starting to grow and plant vegetables, edible vegetables and fruit on their properties. And that's kind of a good thing because it's a change in mindset. Where we're used to getting our food from a grocery store, when we have the potential to at least take care of some portion of that on our own.*
>
> *Planner*

Natural environment

In their responses, councillors and developers drew the link between the natural environment and personal health. They made this connection more than planners did. A common theme across councillors and planners was the acknowledgement that environmental measures are costly. Many had the impression that community members are not yet at the point where they are willing to pay for these features directly or indirectly through municipal taxes.

Table 6: Environmental focus

Interview themes	**Literature**[9,10,11, 12,13]	**Marketing materials**[14]
Environmental focus - Buildings (including mould)	- clean, safe physical environment of high quality (including housing quality)[9]	- innovative storm water management systems[14] - energy and environmentally efficient homes[14]
- Natural (including air quality)	- clean and safe physical environment[11] - reduction in emissions that threaten climate stability[10] - ecosystem that is stable now and sustainable in the long term[9] - an attractive environment with acceptable noise levels and good air quality[10] - good water quality, sanitation and waste disposal[10] - protection of the natural environment[11] - responsible use of resources to ensure long term sustainability[11] - promote clean air, high-quality water, and related positive health outcomes[10] - resource conservation[13] - environmental impacts[13]	- green living[14] - vast and open greenbelts - respects nature - community that communes with nature - eco-consciousness[14] - maximum retention of local flora and fauna[14]

[9] World Health Organization. (2011). *Health city checklist*.
[10] World Health Organization, Europe. (2005). *Bursa statement.*
[11] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.
[12] Urban Public Health Network. (2010). *Healthy Canada by design.*
[13] CMHC. (1996). *Changing values, changing communities*.
[14] West Bedford Holdings Ltd. (2010).

Councillors felt that the Regional Plan and HRM policies spoke of the natural environment and the need for protecting green spaces. One councillor clearly linked the natural environment and health describing them as "joined at the hip". Council members referenced "sustainable" and "sustainable communities" frequently, but did not expand further on the meaning of those terms. Councillors spoke of the environmentally-friendly initiatives they support, such as the Solar City initiative, and recognized that a time lag exists between implementation and public acknowledgement of council's efforts. Only one councillor spoke of air quality as part of the natural environment and related it to buildings.

> *Sustainability and the environment and health, they're joined at the hip. They're just one and the same.*
>
> *Councillor*

Developers often linked the natural environment to health in terms of the energy efficiency of homes and some of the green initiatives they are implementing - rain barrels, retention of conservation lands, and cautions on use of pesticides. Developers used buzz words such as "green", "ecological" and "carbon footprint" when discussing the natural environment. Air quality remained a minor issue, with a sole developer referring to the impact of commuting on air quality.

Neither did planners focus on air quality. One planner described the building code as protecting residents from mould. That remained the only air quality reference made by planners. Planners spoke in greater detail on environmentally-friendly practices being instituted, such as grey water recycling, water conservation, solar panels, LEED standards, watercourse buffers, and new energy approaches like wind and geothermal. Planners generally agreed that good planning requires attention to and protection of the natural environment. A planner working in the private sector questioned whether or not the public is willing to pay for development that strives for higher environmental standards. They pointed to a lack of municipal incentives and public interest as supporting the traditional way of developing the suburbs.

> *…when you do good, sound planning, you look at what you've got to deal with. And one of the natural benefits we're very fortunate to have in Nova Scotia, in Halifax, is we've got a lot of natural, unspoiled environments. Good planning says we should protect the things that are important to us, right, and plan in a healthy manner.*
>
> *Planner*

One planner made an interesting observation regarding the promotion of environmental standards in urban versus rural areas. They felt that urban developers were more likely to promote green features of developments. This was the only reference to a divide in the approach between urban and rural developments marketing strategies.

> *In the urban areas, I find developers are much more willing to utilize or promote themselves as being green or sustainable, as compared to with the suburban stuff. I don't exactly know what the reason for that is. Perhaps it's just an intrinsic thing that people living within the city are maybe more interested in knowing that or maybe it's more of a selling feature to them.*
>
> *Planner*

Community well-being and sense of community

The broad theme of whole and complete communities was mentioned frequently by respondents. Councillors, developers and planners acknowledged the impact that whole or complete communities can have on residents' abilities to travel through and enjoy their community. I am particularly interested in the sub-theme of community well-being and sense of belonging that respondents described when talking about complete communities.

Table 7: Whole and complete communities

Interview themes	**Literature**[15,16, 17, 18, 19,20]	**Marketing materials**[21]
Whole and complete communities		
- Mixed use	- conveniently locating schools and other amenities[18]	- live, work and play: convenience for an active lifestyle[21]
- Commercial	- mixing housing with other land uses[18] - access to high quality facilities (educational, cultural, leisure, retail, health and open space)[16]	- place where you can Live, Work and Play…[21]
- Community well-being	- strong, mutually supportive and non-exploitative community[15]	- finally, a home where you can have it all[21]

[15] World Health Organization. (2011). *Health city checklist*.
[16] World Health Organization, Europe. (2005). *Bursa statement.*
[17] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.
[18] Urban Public Health Network. (2010). *Healthy Canada by design.*
[19] Heart and Stroke Foundation of Canada. (2010). *Shaping active, healthy communities.*
[20] CMHC. (1996). *Changing values, changing communities*.
[21] West Bedford Holdings Ltd. (2010).

Interview themes	**Literature**[15,16, 17, 18, 19,20]	**Marketing materials**[21]
	- access by the people to a wide variety of experiences and resources, with the chance for a wide variety of contact, interaction and communication[15] - strong local cultural and spiritual heritage[17] - peace, equity and social justice[17] - community[20] - liveability[20]	- self-contained family friendly development[21] - it's all here - convenience - all you need is here[21] - finally, a home where you can have it all
- Sense of belonging	- opportunities for social cohesion and supportive social networks[16] - connectedness with the past, with the cultural and biological heritage of city dwellers and with other groups and individuals[15] - strong, mutually supportive relationships and networks[17]	

One councillor suggested that having everything within a resident's community would promote a sense of belonging. Many councillors described social interaction resulting from having complete, walkable communities. Councillors believed that walkable communities allow residents to get to know one another, and parks and green space in a community provide opportunity sites for interaction. One councillor suggested that the Regional Plan articulated a focus for HRM on more livable communities. They felt livable communities respond to the desires of residents.

> *But I know I've heard a lot of people say "there's no need for me to go elsewhere, everything is here". So the more you get people realizing that… And that just strengthens their sense of belonging as well.*
>
> *Councillor*

> *That's one thing it does as you're walking along, you're chatting, talking, or you're sitting in a park and you're meeting other people. And those are the things that will draw others to you and that's how you meet others. And I think that's what makes a community, is when the people know each other and work together.*
>
> *Councillor*

Developers did not contribute much to this topic. When developers spoke of complete or whole communities, they referred to amenities rather than social connections. Planners were more vocal on this topic and suggested that residents in the suburbs seek a sense of community. Residents' ability to talk with neighbours, interact and walk around their community allows them to lead an "interesting life", according to one planner. That planner also suggested that suburban residents invest in trying to get to know their neighbours and create a community, which is important to Atlantic Canadians.

A lack of community meeting spaces inhibits social interaction. One planner viewed community meeting spaces as enabling social support networks to meet and form bonds (e.g., mom-and-tot groups) and mentioned the need for inter-generational activities to keep children, youth and the elderly socially integrated in the community. Surprisingly, the planner who focused on community meeting spaces and inter-generational activities did not raise these issues when I posed the direct health question.

Civic engagement

Interviewees frequently discussed support (political, staff and public) for planning approaches.

Table 8: Political, staff and public support

Interview themes	**Literature**[22]	**Marketing materials**
Political Support		
Staff support - Collaboration with others		
Public support - Resident attitudes - Civic engagement	- wide participation of residents in decision-making[22] - high degree of participation in and control by the citizens over the decisions affecting their lives, health and well-being	

Councillors listed staff and non-governmental organizations as champions for including health considerations in planning. One councillor described staff's commitment to active transportation, suggesting planners are more committed to it than council members. This hypothesis might hold true, as planning staff clearly saw health as part of the planning process in suburban HRM.

> *Active transportation, yes. So we have it in our policy. Staff believe in it more than probably the politicians.*
>
> *Councillor*

Council members were quite complimentary of staff's commitment and openness to new planning approaches. One councillor described staff as having "a good grasp" of what needs to be done, suggesting staff has a vision of where the municipality needs to

[22] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.

go. However, one councillor suggested that the municipality does not have planning mechanisms in place to support these approaches. Planners described fellow staff as embracing and being enthusiastic about planning concepts such as new urbanism and healthy communities.

Staff noted the need for collaboration with non-governmental organizations such as the Heart and Stroke Foundation (Nova Scotia office). Public support and civic engagement (including NGOs) were discussed regularly by decision-makers. Councillors spoke of their desire for more civic engagement in planning processes. Councillors also described the challenge faced in trying to change people's habits and attitudes, especially the love of the car. Generational issues were raised, suggesting that youth "get it" when it comes to developing the municipality differently than in the past. Comments made by council members suggest that the next generation will make better choices.

Many councillors spoke of the lack of public demand for change. Planning issues are not top of mind for most community members. Councillors suggested a lack of public awareness of the reasons for sustainability, resulting in a lack of commitment. One developer suggested that Canadians prefer to have space around them and that residents would not welcome any changes to their preferred lifestyle.

> *If they're [the general public] willing to pay for it and they see enough benefit in this particular type of development, then they will gravitate towards those developments. So it's all up to the next generation who have expectations that my father wouldn't have had. My father would want the bigger home; whereas the next generation might say "I don't need all that space. I'd rather put my money into sustainable practices…"*
>
> *Councillor*

Planners had a different perspective on public support. They described the public outcry over some proposed projects and suggested that senior staff and council may support innovative approaches, but resistance was encountered during the public engagement phase. Many planners spoke of the importance of public education in the engagement process to inform residents why certain planning approaches are recommended. Planners and councillors described the public's discomfort with change, presenting a challenge in moving forward in the municipality. The comment that public education is critical to garnering support for healthy community approaches was primarily made by

> *People have to buy into wanting these things, literally. And I don't think people want to mess with their lifestyle. They want to have their cars and they like driving the two kilometres out to the local Needs store. It doesn't bother them. And until it bothers them and the understanding of it, until it's…you know, they're charged for it, their taxes are more expensive in the suburban areas…*
>
> *Developer*

planners. Planners put a great deal of faith in the efficacy of public education to effect change.

Council members spoke optimistically about council changing and expectations that in future, council will start asking for more innovative approaches. Not all councillors shared that sentiment. One councillor was cynical of the terms such as new urbanism and sustainable development, and felt that anyone could use them for their own purposes.

> *Now with this amalgamated format and this political thing, of people wading between rural and suburban and city, the decisions that are coming, they're always meant to be balanced, and "oh, we can't upset the suburban area or the rural area so we better give them transit, we better give them this". And all the while, we've not protected the downtown.*
>
> *Developer*

One developer felt strongly that the current make-up of council (urban, suburban and rural) holds the municipality back from new planning approaches. They felt that the current organization of council creates a situation where council needs to appease everyone.

Healthy communities

> *You know, there's a lot of opportunity for walking and running and that kind of physical activity. But my kids can't walk to school, and that's not good in my opinion. And that's a problem for our next generation really.*
>
> *Resident*

Residents were asked the extent to which they considered their neighbourhoods to be healthy communities. Residents spoke positively of their areas being healthy communities, and mentioned environmental aspects such as parks and green space, social, recreation facilities, active transportation infrastructure, and the natural environment. One respondent described efforts in their community for recycling, composting, organic gardening and green features of homes, the only resident to reference the natural environment. One resident referred to a positive social environment. The remaining residents focused mainly on the built environment of trail networks and recreation facilities.

Personal health was a consistent theme, touching on physical activity, obesity, and healthy eating. Residents mentioned healthy eating, referring to gardening and the availability of a local grocery store as factors impacting health.

Remaining themes

Numerous other themes were mentioned in the interviews, as outlined in Table 9. I am not discussing these themes in depth for two reasons: either respondents did not focus significant attention on the theme, or these themes are linked with another theme already discussed (e.g., parks, green space and recreation facilities relate to physical activity).

Table 9: Remaining themes

Interview themes	**Literature**[23,24, 25, 26, 27]	**Marketing materials**[28, 29]
Parks and green space		- abundance of green space - parks - nature is right outside your door - lush open space - enjoy the beauty of nature - trees and natural vegetation
Recreation - Affordable physical activity opportunities - Facilities - Infrastructure	- providing recreational facilities, parks, trails and safe places to play outside[25]	- hopping on a bike and riding a trail[28] - walking with the kids through hardwood ridges[28] - encourages foot traffic - paths - trails - walkways - connected greenways

[23] World Health Organization. (2011). *Health city checklist*.
[24] World Health Organization, Europe. (2005). *Bursa statement.*
[25] Heart and Stroke Foundation of Canada. (2010). *Shaping active, healthy communities.*
[26] Ontario Healthy Communities Coalition. (2011). *Qualities of a healthy community*.
[27] CMHC. (1996). *Changing values, changing communities*.
[28] West Bedford Holdings Ltd. (2010).
[29] Armco Communities. (2011).

Interview themes	**Literature**	**Marketing materials**
Community design - Auto-centric - Urban design - Density - Child-friendly - Siting of schools, libraries	- making streetscapes appealing to pedestrians and cyclists (e.g., good street lighting, continuous sidewalks)[25] - encouraging higher-density urban areas[25]	- centrally located community within easy reach of work places, shopping areas and amenities
Safety	- emergency planning and community safety - creating safe routes to schools[26] - designing streets that are healthy and safe for pedestrians and cyclists[25] - safe outdoor play areas[25] - health and safety[29]	- envelops residents in a blanket of convenience, safety and serenity - miles away from the hurried pace of the city
Transit	- accessible, ecological and safe transport systems - improving public transit	- reducing our reliance on automobiles through future integrated public transit
Determinants of health - Gender - Health services	- optimum level of appropriate public health and sickness care services, accessible to all[23]	

Interview themes	**Literature**	**Marketing materials**
Demographic shifts - Aging in place		
		- majestic country living[29] - urban lifestyle enveloped by a rural ambience
	- diverse and vital economy[26] - economic viability[27] - access to diverse employment opportunities - equity and poverty reduction - equity[27]	
	- opportunities for learning and skill development[26]	

What wasn't discussed in detail? What's missing from the discussion?

I expected to hear more discussion of themes such as healthy eating, mental health, social aspects of the community, and concerns about children and youth. Few respondents mentioned healthy eating and food. Respondents rarely mentioned urban gardening, and renewed interest in it in recent years. Respondents did not mention access to healthy, affordable food options or food insecurity.

Respondents gave minimal consideration to mental health. Aside from discussion of mental health benefits of parks and green space, only one respondent noted the stress associated with commuting for suburban residents. Another respondent suggested that suburbs provide mental health benefits for residents, possibly providing residents with a measure of control over their environment. The overall social environment and issues of social cohesion were not a focus of councillors, developers or planners.

Community design features were mentioned throughout the interviews, on diverse topics such as urban design, auto-centric communities, density, siting of public institutions and child-friendly design. Only one planner working in the private sector spoke of the lack of child-friendly environments. They spoke of the difficulty siting day cares, which are now placed in industrial parks near the workplaces of parents. This planner felt that most playgrounds lacked features that would interest or challenge

children. The respondent had specific concerns over the lack of opportunities and activities for youth, especially youth living in rural locations. The planner felt one of the barriers to a child-friendly community was the cost of activities.

Figure 16: Typical 'pocket park' in suburban development

What are some emerging issues? What's on the horizon?

Many respondents touched on affordable housing as an emerging issue. Respondents frequently referred to the suburbs as offering affordable housing options for many residents. Planners spoke of the difficulty in addressing affordable housing, and some felt that not enough was done to address it. One councillor suggested that developers find it easier to provide public art, rather than affordable housing, to receive development incentives.

> *I think that, you know, socio-economically, we need to be more responsible to people who aren't as well off… we've caught on that we need to require green space within a subdivision. Why are we not catching on that we need to require something that's more affordable within that community as well? …I know we're worried about our affordable housing stock but I don't know how proactive we're being about solving that problem.*
>
> *Planner*

Table 10: Affordable housing

Interview themes	Literature[30]	Marketing materials
Affordable housing and shelter	• access to affordable, high-quality housing[30]	

Is it all rhetoric? Are there examples when it appears to be rhetoric?

New approaches are frequently introduced in planning. These approaches often share similar features such as walkability and conservation of natural features. Some people may be skeptical of the differences found among approaches like smart growth, new urbanism and healthy communities. Having conducted the research, I question whether the resurgence in the interest in health and healthy communities represents a sincere concern over public health or if it is a situation of the interchangeable use of these terms with other planning approaches. In most cases, respondents were describing approaches to planning that target health; however, there were instances where health approaches were blurred somewhat with other concepts such as sustainable development. One planner, when asked about smart growth, new urbanism, healthy or sustainable communities in HRM responded that they "use those tags", pointing to the interchangeability of the terms.

> *Oh, very good but it's slow stuff. Smart - smart city, smart cars - of course those are pretty nice words. You'll find politicians, they like those nice words. We're full of rhetoric but we'll make nice speeches. We'll even read somebody else's speech if it sounds pretty good. What about the translation? What does it mean?*
>
> *Councillor*

> *So that's a healthy way of living, it's a green way*.
>
> *Developer*

Planners working as private consultants took a more cynical view than municipal planning staff about health influencing municipal policy. Municipal planners saw active transportation showing up in policy and regulations, and gave the example of bike racks being included in current regulations.

How did respondents' personal lives impact their perspective?

I detected an influence of the respondents' place of residence on their responses. Many respondents shared information on the general location of their home during the interviews. A few planners spoke of living in the suburbs, or a bedroom community outside the Regional Centre. These planners tended to speak positively about suburban living and suggested that not all residents want to live in an urban environment.

[30] World Health Organization, Europe. (2005). *Bursa statement.*

Developers living outside of the Regional Centre spoke of the need for a balance of development in both urban and suburban areas. One developer mentioned the stress that commuting provides and went on to describe their dislike of commuting to work daily. These findings reveal the influence personal experiences have on responses. In future research, questions should be included in the interview guide to determine the place of residence of the interviewee, thus allowing this effect to be explored further.

4.5 Synthesis of Findings

Marketing relates to discourse

The practice of people moving to suburban locations originated partly in response to overcrowded urban living conditions. Residents wanted to escape urban overcrowding and enjoy fresh air, space, and safety. This refrain is still evident in today's planning discourse through developer marketing materials, and when respondents suggested residents' motivations for moving to suburban areas.

I found great synergy between marketing approaches and themes mentioned during the interviews. Marketing materials and interviews both touched on the space that suburbs provide residents. Planners referred to residents as desiring more space and that refrain repeated itself in realtor listings of suburban residential properties. One developer's marketing materials used the analogy of a blanket, with the suburbs wrapping residents in safety and convenience. Councillors and planners often gave safety as a reason why residents moved to the suburbs. The developer refrain of "live, work and play" appears in the Regional Plan and in interviewees' description of the Regional Plan.

A planner suggested that urban developers are more likely to promote themselves as "green". I did not examine marketing materials for urban developments, so I am unable to substantiate that comment. I found suburban marketing materials referenced trees and the natural setting provided by suburban developments. Green building practices were not heavily featured in marketing materials, with the exception of one developer.

Changing demographics

Ideals of post-World War II generations to own a property with ample personal space and access to nature persist today. Families continue to look for opportunities to live in the suburbs. This aspiration persists while the population increases and household sizes decrease, leading to growth in suburban areas.

The number of dwellings increased while single detached homes continue to be significantly larger than homes from the 1950s. The increases in housing size and number of dwellings contribute to suburban 'sprawl' which is often reported as negatively influencing health. The desire for more personal space and a healthier environment inadvertently creates a sprawling development pattern.

Evolving concept

One of the experts I consulted discussed the changing focus of the healthy community movement. Clare O'Connor suggested that the definition of healthy communities evolves over time (personal communication, November 1, 2011). The evolving definition of healthy communities aligns with one of Gallie's (1956: 172) characteristics for contested concepts. Gallie (1956) suggests that a contested concept "must be of a kind that admits of considerable modification in the light of changing circumstance". My review of the healthy communities movement over time, combined with the interview findings, demonstrate the evolution of healthy communities and approaches to health in planning.

> *Town planning and health go back a long way. However, there have been many important steps forward in just the last decade in defining what a healthy community is and how built form can contribute to physical activity and healthy eating. This work and the connection between health and planning in relation to our current and projected needs as a population is extremely important. Where it leads is hard to say, but the fact that it's top of mind for planners, academic researchers, community residents, health organizations and so on is really great to see and be part of.*
>
> *Clare O'Connor*
> *Principal, Full Picture Public Affairs*

The collaboration between the fields of planning and public health has experienced a shifting focus over time. Originally focused on containment of communicable diseases in the mid-1800s, over a century later the collaboration centred on a more holistic view of health during the first round of the healthy communities' movement. The initial healthy community movement in the 1980s focused on environmental and health outcomes and considered health as a robust concept that included healthy water and air, safety (e.g., bike helmets), and waste disposal (e.g., recycling). In recent years, the concept of healthy communities continues to recognize the importance of the natural environment, but greater attention focuses on the built environment's effect on health, addressing non-communicable diseases such as cardiovascular disease and obesity.

Planning profession's approach to health

Planning's response has continually focused on identifying a role for the profession in advancing health. When planning and health first collaborated centuries ago, community design provided a means of containing and preventing illness. Presently, active transportation and community design features (e.g., complete communities) are concepts discussed by planning professionals and other respondents as opportunities for planning to advance health goals. The concept of health was broader and possibly less defined for planners during the healthy community movement in the 1980s. This could explain the lack of uptake by planners at that time; however, the stoppage of federal funding likely played an equivalent role in slowing momentum.

Throughout the interviews, notions of timing and other conditions were mentioned in several ways. Councillors commented on active transportation, suggesting that active transportation opportunities and health are conditional on age, topography or landscape, and climate. Respondents also described generational differences. One councillor felt that the younger generation "get it" when it came to new planning approaches in HRM. This comment suggests the councillor believes that things will improve in future generations. Through identifying these conditions, respondents may unknowingly be providing an explanation why healthy community approaches are not fully realized. Many respondents considered health to be important. However, suggesting that future generations will likely improve things provides a justification for not making changes at present. It will require a shift in priorities to address the more challenging aspects of the broad healthy community approach (e.g., equity, affordable housing).

Based on the interview findings, it appears that the tangible, easier to implement ideas of healthy planning, such as infrastructure (trails and sidewalks), are the elements cited most often in the re-emerging healthy community movement. Less is mentioned of more difficult issues such as engaging members of the community who are marginalized, including residents with mental health issues or those of low income. The more challenging facets of planning, such as social planning, are also missing from the discourse (Grant, 2006). The discussion of affordable housing as an emerging issue illustrates this point.

Many respondents described the suburbs as a more affordable housing option. Affordable is a relative term, and could be used to describe more affordable home ownership in suburban areas versus peninsular Halifax where housing costs are generally higher. Affordable housing most often describes housing options for people with lower incomes who may spend the majority of their income on housing costs. Planners and councillors mentioned affordable housing as an emerging issue and described the need to begin addressing it in HRM. While they acknowledged it as an issue, they did not offer many solutions or mechanisms to tackle it. The Regional Plan targets "affordable housing that is integrated into the overall community" (HRM, 2006: 16). Recognition among councillors and planners, and policy support via the Regional Plan, suggests that affordable housing could be a priority for HRM in the near future.

Disconnect between environmental modification and result

In Halifax Regional Municipality, the link between environmental modifications and proposed health outcomes remains vague. Planners spoke of the importance of the natural environment but did not outline its link to health outcomes. Councillors described complete communities as leading to opportunities for social interaction, implying that urban form alone can create interaction.

Based on interview findings, no explicit mechanisms clarify how changes to the built environment will result in healthier outcomes for residents of suburban areas. This notion of resulting health was implied by respondents; however, no bridging explanation was given to describe how an environmental modification would produce a health result. Respondents described the importance and features of healthy communities, but the link was not made between the environment, residents' behaviours and health outcomes. Responses hinted at environmental determinism being embedded in the concept of health. This was one of the cautions that Williams (2007) presented in her research synthesis of the relationship between the built environment and physical activity. Williams (2007) cautioned against over-emphasizing the role the environment plays in physical activity and acknowledged that personal preferences were important considerations.

I interviewed residents who spoke about the busy pace of their lives and the demands of their families, which constrained their choices. For example, respondents with family commitments, such as young children in daycare or aging parents needing to attend medical appointments, spoke of the necessity of their private vehicles to fulfill daily responsibilities. These social factors fall outside of the physical environment, but they impact decisions and behaviours of community residents. This aspect was not mentioned by planners, councillors or developers.

5.0 Conclusion

5.1 Further Research

I suggest further interviews take place with developers and residents in HRM. The interviews in HRM provided valuable insight on the role of health in planning suburban developments. The sample of councillors and planners provided a fulsome discussion. The developer and resident samples were smaller than originally targeted, somewhat limiting the conclusions I could draw.

In those additional decision-maker interviews, I suggest a question be added seeking clarity on the differences between the contemporary planning approaches. The existing interview question did not provide responses that differentiated these approaches. A question such as "*To what extent do contemporary planning philosophies such as new urbanism, smart growth, green communities and healthy communities differ?*" The revised question might clarify the differences that decision-makers see between these approaches in HRM and across Canada. Consideration of different planning approaches as rhetoric or meaningful is an important aspect of the trends analysis.

5.2 Conclusion

In HRM, when respondents were given initial prompts on health at the start of the interviews, health permeated the discussion of suburban planning. Many respondents initially required clarification of what was meant by health or healthy communities, suggesting it may not be a regular part of the discourse. Once clarified, respondents used health in ways that advanced their own agendas. Developers referred to health and healthy features that residents desired, focusing on the economic benefit of providing those features. Some developers referred to the natural environment by describing the energy efficiency of the homes they built, framing health in a manner that supported their work. Planners and councillors made the connection between planning approaches and health, and often used health to frame an existing planning approach or concept such as compact development, increasing density and improving walkability. It appears from the interviews that the perspectives of respondents may also be affected by where they live. The influences of respondents' roles and personal preferences for their own living environments shaped responses.

> Are there communities within HRM that you think of when you hear the term sustainable community or a healthy community or one that follows smart growth?
>
> *Right. And I would say, from a political point of view, those are just words and that they can be used whatever side you're on.*
>
> *Councillor*

The fields of health and planning share a history of collaborative action. This collaboration has had periods of significant attention that wanes after some time. What remains to be seen is whether the current priority of health in planning has staying power. If health continues to form part of the planning discourse in suburban HRM, it needs to move beyond the current theoretical discussion. Policy statements are one step along a continuum leading to healthy communities. Planners, councillors and developers will need to move beyond making theoretical links between planning and health, and put policies and programs into practice if HRM is to apply principles of healthy communities.

Health provides a unifying concept that supports and helps frame other contemporary planning approaches. My research provides a snapshot in time of the current focus of health in planning suburban HRM. The findings present the current views of residents and decision-makers (planners, councillors, developers) on how they see health being considered in planning suburban areas of HRM. I hope it proves useful to planners and health professionals to see that there is awareness of health; however, this is not necessarily translating into a comprehensive application of health and healthy communities. An opportunity presents itself to local planners and health professionals to re-examine the concept of health in planning suburban areas of HRM, and jointly

assess if more could be done. If planning and public health professionals view health as a joint priority, they need to go further and translate concepts and policies into practice.

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Definitions

Coding - "is the process of organizing the material into chunks or segments of text before bringing meaning to information" (Rossman & Rallis, 1998: 171 as referenced by Creswell, 2009: 186).

Health - "to reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities" (Ottawa Charter for Health Promotion, 1986: 1).

Healthy City - "a healthy city is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential"(World Health Organization, 1998).

Population Health Approach - "Population health refers to the health of a population as measured by health status indicators and as influenced by social, economic and physical environments, personal health practices, individual capacity and coping skills, human biology, early childhood development, and health services. As an approach, population health focuses on the interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of those populations" (F/P/T Advisory Committee on Population Health, as referenced by Public Health Agency of Canada, 2001).

Qualitative interviews - "the researcher conducts face-to-face interviews with participants, interviews participants by telephone, or engages in focus group interviews with six to eight interviewees in each group. These interviews involve unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants" (Creswell, 2009: 232).

Qualitative research - "a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures; collecting data in the participants' setting; analyzing the data inductively, building from particulars to general themes; and making interpretations of the meaning of the data. The final written report has a flexible writing style" (Creswell, 2009: 232).

Regional Centre - "former cities of Halifax and Dartmouth" (HRM, 2006: 6).

Rural Commuter Designation - "encompasses rural communities within commuting distance of the Regional Centre which are heavily influenced by suburban style forms of residential development" (HRM, 2006: 39).

Rural Resource Designation -"encompasses the rural communities along the Eastern Shore which are more reliant on a traditional resource-based economy" (HRM, 2006: 39).

Suburbs - "in the North American context, the term suburban residential development (SRD) is defined here as new construction on the fringe of the main built-up area, in which moderately high densities and small lot sizes (typically one tenth to one quarter acre, or 400 to 1,000 m^2) are achieved through (or necessitated by) the provision of central services)" (Millward, 2002: 45).

Appendix 1: Question Schedule for Decision-makers[31]

Shading indicates new prompts and questions added to the interview guide for the purposes of this research project.

Questions for Planners, Developers, and Councillors:

We are trying to understand current trends in planning and developing the suburbs of Canadian cities. We're hoping that you can help us learn more about those trends here in Halifax.

- What is your role in planning or designing the suburbs here?
- How would you characterize the rate of growth here in this city compared with other parts of Canada?
- How do suburban development patterns and characteristics here compare to trends in other parts of Canada?

- How have ideas about **smart growth, new urbanism, healthy communities or sustainability** influenced policies and regulations here?
- What are the challenges you see to implementing smart growth, new urbanism, healthy community and sustainability ideas in suburban development?
- What smart growth, new urbanism, healthy or sustainable communities do you have here?
- What role did you and your colleagues play in designing or planning the project(s)?
- What were the challenges to making the development(s) happen?
- How did municipal planning authorities respond to the project(s)?
    - Where did support or resistance come from?
- Does the municipal plan support smart growth, new urbanism, healthy communities or sustainable development?
- To what extent do municipal authorities promote this kind of development?
- What do you see as the benefits of this kind of development?
- What are the disadvantages of this kind of development?
- How has the local market responded to projects employing these principles?
- To what extent are developers following up on the project with other similar ventures?
- What do you see as the future of these kinds of projects in this area?

- How common are **private communities** here (that is, enclosed areas with private streets or access ways shared by multiple units, often in condominium ownership)?

[31] Jill Grant, Suburbs Project, Dalhousie University.

- How extensive are gated communities (that is, private communities with access controlled entries)?
- How have municipal planning authorities responded to private communities?
    - Where did support or resistance come from?
- How does the municipal plan support this kind of development?
- To what extent do municipal authorities promote this kind of development?
- What do you see as the benefits of private communities?
- To what extent is the development consistent with metropolitan smart growth objectives?
- What disadvantages do you see to this kind of development?
- How has the local market responded to private communities?
- How is the development of private communities changing the suburbs?

- Planners often prefer new urbanism communities to gated developments, but gated and private communities seem to be proliferating. How do you explain this difference?

- What are community residents looking for in new suburban areas?
- What new development trends do you find appearing in the suburbs here?
- What do you see as the key concerns for the future of Canadian suburbs?
- What do you see as the long-term challenges to planning and developing sustainable communities?

- To what extent do you try to accommodate a variety of households – different combinations of residents in the suburbs?
- What are some of the benefits of promoting a mix of housing types?
- What are some of the challenges to achieving a mix of housing types?

- How do principles of sustainable development influence current developments here?
- How effective are your efforts to make the city more sustainable?
- What are some of the challenges to implementing a sustainability agenda?

- To what extent is health part of the discussion of planning in the suburban context of HRM?

- Can you comment on how you think the recent economic crisis may affect development in this region?
- How do you think the economic crisis may affect suburban areas?

- Is there anything you would like to add before we wrap up?

Thank you for your help.

Appendix 2: Question Schedule for Residents:

Shading indicates a new question added to the interview guide for the purposes of this research project.

We are trying to understand current development trends in the suburbs of Canadian cities. We're hoping that you can help us learn more about residents' perspectives on those trends here in Halifax.

- Can you begin by telling us a little about your neighbourhood? (such as its name, size, character, etc.)
- What factors were most important to you in choosing to live in this neighbourhood?
- What do you see as the best features of this neighbourhood?
- What do you think are the worst features of this neighbourhood?
- How would you describe the social characteristics of the neighbourhood?
- How would you describe the physical characteristics of the neighbourhood?
- How does your neighbourhood differ from other new developments in this community?
- In what ways would you say your neighbourhood is well-planned and designed?
    - What could be improved in the neighbourhood?
- To what extent is your neighbourhood a healthy community?
- To what extent are you involved in local community activities and associations?

I'd like to ask you a few questions about your housing:

- How long have you lived in your home (in years)?
- Where did you live prior to moving here?
- How does this home differ from your previous place of residence?
- Do you own or rent your home? Is it a condominium unit?
    - *If it is a condominium unit:* What attracted you to living in a condominium?
        - To what extent are you involved in the condo association?

I'd like to ask you a few questions about your travel behaviour:

- How do you get to work (or school) most days?
- How long does it take you to get there most days?
- How do you travel to do your shopping most often?
- When was the last time you walked to a local store?
- When was the last time you drove to a big box retail outlet?
- When was the last time you used public transportation?
- What characteristics in your neighbourhood affect your decisions about how to travel where you need to go?

- How would you characterize the rate of growth in this city compared with other parts of Canada?
- How do suburban development patterns and characteristics here compare to trends in other parts of Canada?
- What new development trends do you see appearing in the suburbs here?
- What do you see as the key concerns for the future of Canadian suburbs?
- What do you see as the long-term challenges to planning and developing sustainable communities?

- To what extent do the suburbs here try to accommodate a variety of households – different combinations of residents?
- What do you see as the benefits of promoting a mix of housing types in the area?
- What are some of the challenges of a mix of housing types?

- How do sustainability principles influence development in your community?
- How effective are local efforts to make the city more sustainable?
- What do you see as the long-term challenges to planning and developing sustainable communities?
- Can you comment on how you think the recent economic crisis may affect development in this region?
- How do you think the economic crisis may affect suburban areas?
- Is there anything you would like to add before we wrap up?

Thank you for your help.

Appendix 3: Sampling approach

I prepared a sampling frame of potential interviewees (under the supervision of Dr Grant), using a convenience sampling method. I identified residents of suburban areas in HRM through personal contacts and internet searches of community associations. I focused on reaching members of resident associations for their awareness of current issues and concerns. The residents interviewed represent various geographic locations across HRM.

I identified planners through internet searches and personal contacts in the HRM Planning Department. The snowball technique assisted me in identifying planners with suburban work experience who were then approached for interviews. Councillors representing suburban areas of HRM were targeted. Finally, I identified developers through reviewing real estate and industry flyers to determine which developers were building suburban developments. I targeted owners and senior-level managers of these development companies for interviews.

Recruitment took place through phone calls and emails in early June 2011 to secure participation and arrange interview times. I followed-up with calls and emails to confirm participants. Once an individual agreed to be interviewed, I provided a letter of consent (approved as part of Dr Grant's research ethics application - see Appendix 5) for signature, along with the interview questions. I hoped to achieve roughly equal proportions for each target group (i.e., 5-8 residents, planners, etc.). I set a target of five interviewees per target group as the minimum standard and came close to achieving it. The snowball technique used during the interviews proved helpful in receiving suggestions for additional people to interview.

I attempted to interview residents from older and newer suburbs geographically distributed across HRM. It proved challenging to recruit residents during the summer months. The low sample size of four residents, below the target of 5-8, affected the discussion of resident perspectives in the findings.

Appendix 4: Suburbs - Visual Survey[32]

Suburbs - Visual Survey
Date: _____ Initials: _____

City: _____
Name of development: _____
Approximate date of development: _____
Photo #s: _____

Map showing main streets:

Housing types: (check all present)
[ ] Single detached [ ] Semi-detached
[ ] Apartments [ ] Townhouses
[ ] Bungalows [ ] Two-storeys
[ ] Live/work units [ ] Condominiums

Street types present:
[ ] Boulevard [ ] Local with parking
[ ] Local no parking [ ] Cul-de-sac
[ ] Lane/alley [ ] Private
[ ] Curvilinear [ ] Grid

House setbacks from street (metres):
Minimum: _____
Typical detached: _____

Entry features:
[ ] Name sign [ ] Landscaping
[ ] Gate type: _____
[ ] Boundary type: _____
[ ] Other: _____

House lot frontage-detached (metres):
Minimum: _____
Typical Detached: _____

Garage types:
[ ] Attached front [ ] Attached under [ ] Attached at side [ ] Attached at back
[ ] Detached [ ] Detached at back [ ] Detached with residential unit over
] Carport [ ] For one car [ ] For two or more cars [ ] No garage

Design characteristics:
[ ] Front porches [ ] Front steps only [ ] Sidewalk - one side of street [ ] Sidewalk - both sides of street
Building materials: (list) _____
Style/character: _____
Vegetation character: _____

Commercial uses present:
[ ] convenience
[ ] "centre" (list): _____ [ ] peripheral (list): _____
[ ] mixed use area (includes): _____

Public transit present:
[ ] Bus service available [ ] "Future bus stop [ ] Park and ride [ ] Other mass transit

Institutional / recreational uses present:
[ ] Church [ ] School [ ] Fire Station [ ] Park [ ] Playground [ ] Police station
[ ] Sports field [ ] Other: _____
[ ] Accessibility of public amenities: _____

Home prices on several properties (if available):

Date:	_____	_____	_____	_____
Address:	_____	_____	_____	_____
Home type:	_____	_____	_____	_____
Home size:	_____	_____	_____	_____
Cost:	_____	_____	_____	_____

Comments / any special features or new trends (continue on reverse if necessary):

[32] Jill Grant, Suburbs Project, Dalhousie University.

Appendix 5: Research Ethics and Consent Letter

Dalhousie University granted ethics approval in February 2011 for the project *Trends in Residential Environments: Planning and inhabiting the suburbs*. The ethics approval extends to the interview questions (see Appendices 1 and 2), the recruitment letter and the consent form. My additional interview questions form part of the overall interview guide that already received ethics approval. A consent form was signed by all interview participants.

Care was taken in gathering, analyzing and storing interview transcripts and tapes to ensure respondent names remain confidential. Paper copies of transcripts remain locked in cabinets on campus and in Dr Grant's home. Dr Grant and I store electronic copies of documents on our personal computers. All electronic documents that refer to interviewees by name require a password to access them. Dr Grant approved these data storage methods.

I refer to participants by their title (e.g., "Planner" or "Resident") in reporting findings. The only obvious risk to participants would be if their comments were recognizable. Participants will benefit from receiving the final report and learning more about the suburbs in HRM, and the experience in other regions of Canada.

Consent Letter

[date]

Dear

Project Titles: **Trends in residential environments: planning and inhabiting the suburbs**
Global suburbanism: governance, land, and infrastructure in the 21st century

Principal Investigator: **Dr. Jill L Grant**, FCIP LPP
School of Planning, Dalhousie University, Box 1000, Halifax NS, B3J 2X4
902-494-6586 fax: 902-423-6672 Jill.Grant@dal.ca
Dear Study Participant:

I **invite you** to take part in a research study at Dalhousie University. The work is funded by the Social Sciences and Humanities Research Council of Canada. Taking part in the study is voluntary, and you may withdraw at any time. We will use the information collected only for research purposes. This letter explains what you will be asked to do, and any risk or inconvenience you may experience. Participating in the study may not benefit you directly, but we hope to learn things which will improve understanding of community planning. Please feel free to discuss any questions you

have with me, Jill Grant. If you agree to participate, please sign the form at the bottom and return it to me, or to my research assistant, Heidi Craswell, at the address listed here.

The **purpose of the study** is to identify recent trends in suburban development. We are especially interested in the implementation of ideas associated with smart growth, new urbanism and sustainability, and also in the widespread growth in private and condominium developments. We focussed our earlier research on communities experiencing rapid growth in three provinces: Alberta, British Columbia, and Ontario. Now we are turning to development trends in Halifax in order to understand trends in the region.

For this research we are arranging **in-person interviews** with people living and working in the cities selected for analysis. We hope to interview **community planners, council members, and project developers** who have been involved in the process whereby new communities get approved for development. We are also interviewing the **residents** of new developments in these communities for their views. My research assistant, Heidi Craswell, will conduct the interviews. We expect each interview to take about **45 minutes to one hour**; it will consist of semi-structured questions about your experience and opinions. (We have attached an outline of the question topics we will discuss.) If you agree, we will tape record the interview; alternatively we can take notes. You may refuse to answer any question, or end the interview at any point. (If you decide to withdraw from the study, we will destroy any data you contributed.)

We recognize that participating in this study may cause you some **inconvenience**, but we will try to minimize that by visiting at a time and place convenient for you. We will try to limit the **risk** that anyone reading the results of the research can identify you from your comments. In publications, we will not use any identifying information other than your type of position (for example, “planner” or “project manager”) and the city involved.

We will keep your remarks **confidential**. We will never reveal your identity. We will maintain our interview notes and any analysis based on them in a secure location. Only my research team (myself and students working on the project) will have access. Dalhousie University policy requires that data be stored securely. I will retain the data for long-term study of development trends.

We are happy to share the results of the research with you, as we hope that you may find **benefit** in knowing more about the topic. We post the results of our research on our project web site at http://suburbs.planning.dal.ca/index.html . We hope that you may find it helpful to learn about experience in other regions. The work contributes to general knowledge about recent trends in Canadian urban development. (Should any

new information arise which may affect your decision to participate in the study, we will let you know immediately.)

In the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact the Human Research Ethics Integrity Coordinator at Dalhousie University's Office of Human Research Ethics and Integrity for assistance. (902-494-1462, patricia.lindley@dal.ca)

If you agree to participate, please sign the consent form attached, and check the boxes to signal your preferences. Thank you for considering our request.

Sincerely yours,

_____ _____

Dr. Jill L Grant, School of Planning Date

Research assistant: _____
Heidi Craswell, Masters student
Email: hcraswel@dal.ca
Phone: 902-999-6552

School of Planning 902-494-3260
Dalhousie University
Box 1000, Halifax, NS
B3J 2X4, Canada

PLEASE READ AND SIGN IF YOU AGREE: <u>Consent form</u>

I have read the description of the project and agree to participate as set out in this form. I understand that I may refuse to answer any question and that I may withdraw from the study at any time.

_____ _____ _____

Name Signature Date

I agree that you may record my remarks for transcription:

[ ] Signature or initials: _____

I agree that you may use brief quotes from my remarks:

[ ] Signature or initials: _____

I agree to be contacted for additional information during the course of the study, should that prove necessary.

[ ] Signature or initials: _____

I would like to be informed of the preliminary results of the research:

[ ] Mailing address: _____
_____
_____
_____

Email:

Keep one copy of this form for your records, and **return a signed copy** to:

Jill L Grant, School of Planning, Dalhousie University,
Box 1000, Halifax NS, B3J 2X4, Canada
fax 902-423-6672

Visit our website for further information on the research:
http://suburbs.planning.dal.ca/index.html