EXPLORING THE ROLES OF URBAN MUNICIPAL GOVERNMENTS IN ADDRESSING POPULATION HEALTH INEQUITIES:

PRESCRIPTIONS, CAPACITIES AND INTENTIONS

by

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ABSTRACT

The 1986 Ottawa Charter for Health Promotion inspired an outpouring of research on the social determinants of health (SDOH) and health inequities (HI), much of it implicating cities as important sites for intervention. Health promotion and the Healthy Cities movement constituted an initial wave of research activity, while population health and urban health dominated a second wave. Yet, this research has inadequately translated into policy action on HI in Canada, and the roles that urban municipalities can play in addressing HI are vague. Thus, the objectives of this mixed-methods research program were threefold: 1) to identify prescriptions made in the HI literatures for municipal government intervention; 2) to assess capacities for intervention based on perceptions held by influential municipal actors; and 3) to assess intentions of selected Metro Vancouver municipalities to address HI in their jurisdictions. Phase One reviewed article abstracts from the HI literatures for SDOH profiles and prescriptions for municipal intervention. Phase Two surveyed politicians and senior-level staff of Metro Vancouver municipalities regarding their views on the SDOH and roles of municipal governments in addressing HI. Phase Three examined Official Community Plans (OCPs) of five Metro Vancouver municipalities for intentions to engage in interventions prescribed in Phase One.

Prescriptions articulated for municipal intervention included health-focused interventions, relationship building, and delivering on slated responsibilities. Capacities and intentions for intervention on HI were mixed. Actors identified

numerous existing policies that could reduce HI, and governments articulated strong intentions to deliver on slated responsibilities and engage citizens. In contrast, indicators of low capacity arose from actors' individualistic SDOH attitudes and perceptions that municipal governments bear little responsibility for HI, and from governments' limited intention to build community partnerships, or engage in health-focused interventions. Common themes were incongruence between scholarly and policy discourse on HI and municipal interventions; individualistic and environmental perspectives towards the SDOH and HI; engaging in status quo interventions and forming relationships with other governments; and concerns about offloading of responsibilities from senior governments. More critical perspectives on challenges to knowledge translation are needed if municipalities are expected to address local HI.

Keywords: health inequities; determinants of health; municipal; policy; urban planning; Canada

Subject Terms: health geography; health policy; social medicine; urban planning; urban health; equality – health aspects

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LIST OF ACRONYMS AND ABBREVIATIONS

- HP – Health Promotion
- PH – Population Health
- HC – Healthy Cities/Healthy Communities
- UH – Urban Health
- SDOH – Social Determinants of Health
    - ISS – Income & Social Status
    - SSN – Social Support Networks
    - EW – Employment & Working Conditions
    - EL – Education & Literacy
    - SE I SS – Social Environment I – Social Services
    - SE II CC – Social Environment II – Community Characteristics
    - PE I BE – Physical Environment I – Built Environment
    - PE II NE – Physical Environment II – Natural Environment
    - PHPCS – Personal Health Practices & Coping Skills
    - ECD – Early Childhood Development
    - HS – Health Services
    - BGE – Biology & Genetic Endowment
    - GE – Gender
    - CT/CAT – Culture & Tradition/Culture, Arts & Tradition
- OCP – Official Community Plan
- LRSP – Livable Region Strategic Plan
- CPTED – Crime Prevention Through Environmental Design

CHAPTER 1: INTRODUCTION

1-1 CONTEXT FOR RESEARCH

1-1.1 Research Background

Beginning in the mid to late 1970s (Lalonde 1974; McKeown 1979; Black, Morris et al. 1980), there has been a growing body of research on health inequities[1] at the level of populations. The 'health inequities knowledge base' that has resulted from this research activity emerged from roughly two eras of research, characterized by two discursive shifts: from *public health* to *health promotion*, and from *health promotion* to *population health* (Tricco, Runnels et al. 2008). The first era, spanning from the mid-1970s to the late-1980s, witnessed a preponderance of activity from health promotion scholars and the Healthy Cities movement, focusing on notions of agency, autonomy, community empowerment, capacity building, and enabling healthy lifestyles through bottom-up approaches to community engagement (WHO 1986; Hancock and Duhl 1988; Hancock 1993; Flynn, Ray et al. 1994). In the second era, spanning the early-1990s to present, the fields of population health and urban health emerged; these disciplines shifted researchers' attention to epidemiology, at-risk populations, structural constraints on healthy living, and top-down policy interventions to tackle health *inequalities* (Evans, Barer et al. 1994; FPT-ACPH 1999; Tsouros 2000; Vlahov

[1] It is important to note that, within this body of research, there is a tendency to conflate 'health inequities' with 'health inequalities'. This tendency is largely attributable to scholarly contributions from the United Kingdom that remain in wide circulation (Hayes 2006). 'Health inequalities' within a population simply refer to observable differences in health outcomes (e.g., differences in heart disease rates between men and women), while 'health inequities' within a population refer to differences in health outcomes that are unjust or unfair (e.g., differences in mortality rates between groups with high-income versus low-income). Another widely used term, especially in the Canadian context, is 'health disparities', which describes differences in outcomes as a metric, and thus reads as more neutral and apolitical than either 'health inequalities' or 'health inequities'. In the context of this research, 'health inequities' are of greatest interest, and will be employed here.

and Galea 2003). Particularly noteworthy over the past 15 years has been the plethora of empirical studies demonstrating the socially graded nature of population health – that is, at an aggregate level, the quality of health outcomes is commensurate with socioeconomic status and the access to health-enhancing resources such status enables (Black, Morris et al. 1980; Marmot, Smith et al. 1991; Wilkinson 1996; Lynch, Kaplan et al. 1998). These studies created an impetus for the establishment of the *social determinants of health* (SDOH)[2], a conceptual framework for describing the multitude of factors (and potential policy levers) that mediate social gradients in population health outcomes (FPT-ACPH 1999; Wilkinson and Marmot 2003). While this framework emerged from the population health literature (Health Canada 2001), its relevance spans the entire health inequities knowledge base.

Despite the profusion of empirical evidence, the establishment of a substantial knowledge base, the institutionalisation of the SDOH by Health Canada, and the multitude of policy recommendations that have followed, there is general consensus among researchers that this academic activity has not adequately translated into policy action to alleviate population health inequities in Canada (Muntaner 1999; Raphael 2003; Heymann, Hertzman et al. 2006; Collins and Hayes 2007). A number of challenges to translating this knowledge have been articulated, including limited dissemination (Raphael and Farrell 2002), lack of political will (Raphael 2000), and the organization of policy responsibilities into

[2] According to Health Canada (2001), there are twelve social determinants of population health: income & social status; social support networks; education & literacy; employment & working conditions; personal health practices & coping skills; social environment; physical environment; healthy child development; healthcare services; biology & genetic endowment; gender; and culture.

sectoral silos (Nutbeam 1999; Whiteside 2004). Empirical investigations have tended to concentrate on this latter challenge, exploring federal and provincial policy advisors' attitudes towards inter-sectoral collaboration (Lavis 2002). A rather neglected area of study, however, has been on the relative role of urban municipalities in addressing population health inequities, and the challenges and constraints they (can expect to) encounter in the process.

Urban municipalities are an important part of the picture for a number of reasons, including the consistent growth in populations in urban agglomerations across Canada (Simmons and Bourne 2003), the inherent tendency for cities to act as socio-spatial sorting mechanisms (Harvey 1973; CPHI 2006), and the importance of urban planning in creating viable living spaces for such geographically concentrated populations (Barton and Tsourou 2000; McCarthy 2002). Thus, the purpose of the proposed research is to explore the roles of urban municipalities in reducing health inequities as prescribed in the health inequities knowledge base, the capacities of such municipalities to perform these prescribed roles, and the intentions of these municipalities to actually reduce health inequities in their jurisdictions. The objectives of this research were threefold: 1) to examine the health inequities knowledge base to identify the roles that have been prescribed for municipal governments in addressing health inequities at the local level; 2) to assess how municipal government actors in Metro Vancouver understand and conceptualize solutions to health inequities; and 3) to assess how the health inequities knowledge base has permeated community planning of selected Metro Vancouver municipalities. The findings

from this research will foster a greater understanding of the challenges and issues associated with translating the health inequities knowledge base into policy action at the municipal level, as well as insights into how urban municipalities can contribute to reducing health inequities in Canada.

1-1.2 Brief Histories of Public Health and Urban Planning

There is a long-standing connection between the manner in which cities are planned and managed, and the health outcomes that are manifested among urban dwellers. The fields of public health and urban planning, for instance, share common origins dating back to the mid 19th century (Pearce 1996; Corburn 2004). Activities in these fields were rooted in miasma theory, which "postulated that disease was caused by miasmas or vapours that arose from putrefying matter" (Ostry 1994: 368). Signifying a union of public health and urban planning, the Sanitation Era of the late 19th century launched an array of public health engineering interventions (e.g., construction of sewerage systems, development of potable drinking water and waste management systems, public health inspection), which have become mainstays of healthy urban living (Ostry 1994; Corburn 2004). Thus, these two domains of intervention evolved simultaneously to combat the "harmful effects of rapid industrialization and urbanization" (Corburn 2004: 541).

The common ground shared by public health and urban planning, however, did not persist. In the late 1800s, Pasteur and Koch uncovered links between organic agents and infectious diseases, leading to the establishment of germ theory (Tomes 1998). With this shift in understanding of disease aetiology,

public health and urban planning each took on new directions in the Western world; public health turned to laboratory medicine and immunization-based interventions (Corburn 2004), while urban planning in North America rigidly applied a Haussman-inspired approach to zoning that created cities with functionally and economically homogeneous neighbourhood units (Frank, Engelke et al. 2003). From the early to mid 20th century, significant developments took place in both the public health and urban planning fields. Public health laboratories became common fixtures of modern hospitals (Jones and Moon 1987), and many vaccination programs proved to be widely successful (e.g., polio, smallpox). Similarly, urban planning became instrumental to increasing national production during the two world wars, and to widespread suburban development following WWII that rewarded veterans with a fresh alternative to the poverty and decay associated with life in the inner-cities (Friedmann 1987; Hayden 2006).

As the 20th century wore on, it became apparent that the new directions these fields adopted were limited in their capacity to improve the health and well-being of populations. The suburban development boom era of the 1940s and 1950s had become synonymous with 'the lack of urban planning', with newly constructed residential subdivisions lacking commercial centers and integration with existing transportation networks (Hayden 2006).[3] The net result of this development boom was the creation of geographically disconnected urban agglomerations that could only be negotiated through the widespread use of the

[3] Some of these subdivisions, like Levittown, New York, were even built without sewage disposal systems (Hayden 2006).

private automobile (Knox and Pinch 2000; Frumkin, Frank et al. 2004). While this booming car culture levelled social gradients by suddenly broadening the scope of car ownership to a range of social classes, these gradients were also reinforced through the physical and social isolation of economically diverse groups produced by exclusionary housing markets. For public health, scholars argued that laboratory medicine had limited influence on improvements in longevity in the developed world (McKeown 1979), and that greater attention needed to be paid to non-medical factors (Lalonde 1974). The apparent limitations of the modern trends in these fields have spawned recent calls for public health and urban planning to rekindle their early connections to develop coordinated interventions aimed at the structural conditions of daily living (Pearce 1996; Szreter 2003; Awofeso 2004). These scholars believe that such a reconnection is a necessary component to tackling population health inequities in urban systems.

1-1.3 Current Health Inequities Knowledge Base

The coordinated efforts of public health and urban planning were instrumental to improving the social conditions of daily living[4] in the developed world in the latter decades of the 1800s. And, after nearly a century of disengagement, the social conditions that influence population health outcomes have re-emerged as a significant concern to many health scholars. The hegemony of modern laboratory medicine on understandings of the health of

[4] These improvements were especially targeted at poor people whose 'petulant' and 'uncivilized' existences were blamed for disease contagion by upper classes, and thus in need of sanitation to reduce transmissibility (Ehrenreich and English 1973).

populations was criticized as early as the 1970s (McKeown 1979). In 1974, Health Canada released a report that recommended the adoption of a broader perspective on the health of populations based on the 'four health fields' of *health care organization*, *biology*, *lifestyle*, and *environment* (Lalonde 1974). Dubbed the 'Lalonde report', this document laid the foundation for the health promotion movement of the 1980s, and facilitated the establishment of at least four inter-related lines of inquiry on health inequities: *health promotion*; *Healthy Cities*; *population health*; and *urban health*.

The Ottawa Charter for Health Promotion was a major catalyst for the establishment of the field of health promotion (WHO 1986). Recognizing the limitations of the healthcare system to the task of improving the health and well-being of Canadians, the Charter instead argued for developing healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. The Charter and the health promotion movement, in general, were guided by principles of social justice, equity, peace, and sustainability. Focusing on the importance of agency and autonomy, the movement aimed to provide the necessary resources and environments that would *enable* individuals to make the right choices in life. It was also concerned with community empowerment, and bottom-up approaches to defining problems and developing solutions. In practice, however, the health promotion movement was characterized most by media campaigns on healthy lifestyles (e.g., ParticipAction) (Love and Thurman 1991), and public health interventions targeting individual-level behaviours (HWC 1986; O'Neill and

Pederson 1994). Of the four health fields from the Lalonde report, health promotion was most active in attempting to change individual *lifestyles* on an aggregate scale.[5]

Emerging from the field of health promotion, the Healthy Cities movement was launched during the first international conference for health promotion in 1986 (Goldstein 2000). The Healthy Cities movement (or the Healthy Communities Project as it was in Canada (Hayes and Willms 1990)) applied the concept of empowerment to communities and cities (Flynn, Ray et al. 1994). The 'movement' conceptualized

> …health policy as a set of processes that raise awareness, mobilize community participation, and develop the roles of local government in public health. (Kenzer 2000: 279)

Thus, Healthy Cities served to contextualize health promotion in space and place, with the aim of promoting health improvement among city dwellers. Early recommendations for relevant stakeholders in the Healthy Cities movement were to develop inter-sectoral partnerships, engage community partners, develop indicators of success, and focus on preventive programs (Hayes and Willms 1990; Sabouraud 1992; Duhl 1996; Kenzer 2000). More recent Healthy Cities initiatives have focused on promoting safety (e.g., ensuring housing quality, injury prevention, crime reduction), environmental quality (e.g., reducing water and air pollution), and physical activity (Duhl and Sanchez 1999; DHHS 2000).

[5] It is worth noting the disconnect between researchers' attempts to operationalize the ideas of the Ottawa Charter – attempts that ultimately fixated on individual lifestyles – and the much broader scope of the Charter's "prerequisites for health" (i.e., peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity). Thus, directions taken in the field of health promotion cannot necessarily be attributed to this foundational document.

Although health promotion and Healthy Cities had substantial momentum and public support during the 1980s, many scholars became increasingly sceptical of these fields. Arguments levelled against health promotion were that it led to victim-blaming for poor health outcomes (Finerman and Bennett 1995), treated people as health consumers (e.g., markets for diet and fitness industries) (Grace 1991), created narrow understandings of health (Love and Thurman 1991), and failed to investigate the social conditions that made some people healthy and others not (Evans, Barer et al. 1994). Meanwhile, the Healthy Cities movement drew criticism for lacking universality in implementation and evaluative indicators across jurisdictions (O'Neill and Simard 2006). Among other reasons, these critiques were fundamental to the launch of the population health approach in the early 1990s (Grace 1991; Labonte 1995; Robertson 1998).

A UK government commissioned study on the impact of healthcare on health *inequalities* was a major catalyst in the development of this new field. The 'Black report' empirically demonstrated that population health inequalities in the UK persisted, and widened, despite the provision of universal healthcare (Black, Morris et al. 1980). Soon after the release of the report, influential publications emerged from other UK scholars demonstrating a socioeconomic gradient in health outcomes (Marmot, Smith et al. 1991; Wilkinson 1992); that is, higher incomes were associated with lower rates of premature mortality and longer life expectancies. Furthermore, the graded nature of these health inequalities persisted even after controlling for 'lifestyle choices', such as smoking, poor diet, and physical inactivity (Marmot, Smith et al. 1991). After a decade of research

focused on understanding population health inequalities across a range of developed countries (Kawachi and Kennedy 1997; Manor, Matthews et al. 1997; Marmot, Ryff et al. 1997), Hayes (1999a) concluded that:

> The persistent, consistent social gradients in health status (however measured) found in virtually every population are strongly and positively correlated with distributions of power, which is typically measured by income, education, occupational status or self-reported sense of control. (291)

The aetiological complexity of population health led to the establishment of a new rhetoric, dubbed the *Population Health Approach*. This rhetoric, originally developed by the Canadian Institutes of Advanced Research and later institutionalized by Health Canada, spawned the Social Determinants of Health (SDOH) – a conceptual framework for understanding the many factors that mediate the health of populations[6] (Health Canada 2001). Thus, the population health approach distinguished itself from the health promotion movement by focusing more on the social environment than individual lifestyles. It was rooted in epidemiological methods, adopted positivist and post-positivist philosophies, and promoted inter-sectoral top-down policy interventions that target social gradients[7] (Dunn 2006).

[6] While spawned by population health, the SDOH framework transcends this field and has utility in all domains of the health inequities knowledge base.

[7] The empirical evidence generated from the Population Health Approach demonstrated that, on aggregate levels, socioeconomic inequities correspond with health inequities. Thus, the implications that derive from the SDOH framework are geared more towards social policy (e.g., income redistribution, affordable housing, universal day-care, increased funding for public education, etc.) than health or healthcare policy (e.g., anti-tobacco campaigns, fitness subsidies, increased funding for hospitals, etc.). Therefore, in the context of health inequities, health policy *is* social policy, so long as the social policy intervention is designed to reduce socioeconomic inequity (and by extension, health inequity).

While largely influenced by the population health literature, the field of urban health emerged in response to growing attention to patterns of global urbanization, the growing burden of disease among vulnerable populations, and pervasive socioeconomic inequities within urban systems (Vlahov and Galea 2003). Characterized as a fusion of epidemiology and urban sociology, urban health has been influenced by both positivism (Galea and Vlahov 2005b) and structuralism (Geronimus 2000). It is primarily concerned with combating specific diseases and illnesses, rather than improving population health or reducing health inequities more generally. Of the health fields articulated by Lalonde (1974), urban health draws on the environment, lifestyle, and healthcare, but from a more limited perspective than the other three bodies of literature.

In sum, substantial scholarly attention has been paid to population health issues in the latter portion of the 20th century. This reengagement has manifested from a number of different perspectives (as above), leading to a vast knowledge base from which to address health inequities.[8] Yet, reductions in health inequities in North America were considerably greater in the first half of the 20th century; for example, disparities in life expectancy between white and black US men dropped from 14 years in 1900 to 8 years in 1950 to 7 years in 2000 (Stevenson 2006). Indeed, recent research has demonstrated the persistence of social gradients in health among the Canadian population as the 21st century has arrived (Wilkins, Tjepkema et al. 2008). Thus, it would appear

[8] It is important to note that, as the respective offshoots of Health Promotion and Population Health, the Healthy Cities and Urban Health literatures are relatively small bodies of literature. Thus, the Health Promotion and Population Health literatures are the primary contributors to this broad knowledge base on health inequities.

that the health inequities knowledge base has not translated into population health improvements comparable to those *attributed* to the convergence of public health and urban planning at the turn of the 20th century (McKeown 1979).

1-1.4 Knowledge Transfer: Contemporary Challenges to Addressing Health Inequities

Despite recent contributions of Canadian scholars to understanding health inequities, there remains a tremendous gap between knowledge and policy action to tackle social gradients in health in Canada, prompting investigations of the challenges to addressing health inequities (Collins and Hayes 2007). Research-related challenges have included inadequate dissemination of the evidence (Evans 2002), conflicting messages from researchers (Hayes 1999b), and complexity of the SDOH framework (Hayes and Dunn 1998). Ideological barriers have been described as lack of public awareness and support for the SDOH (Collins, Abelson et al. 2007), lack of media discourse on health inequities (Raphael 2003), and the multitude of powerful interest groups occupying the healthcare sector (Baxter 1998; Stoddart, Eyles et al. 2006). Policy barriers include concerns of 'health imperialism'[9] from non-healthcare sectors (Lavis 2002), organization of policy responsibilities into sectoral silos (Lavis, Ross et al. 2003), and lack of political will for change (Hayes and Dunn 1998).

Most of the research on barriers to action has focused on more centralized levels of government in Canada (i.e., federal, provincial). A rather neglected area of study, however, has been the role and capacity of urban municipalities to

[9] The concept 'health imperialism' refers to the infiltration of health-related policy making into policy sectors without a health portfolio (e.g., finance, trade, labour, social services).

address population health inequities in their jurisdictions. While the Healthy Cities movement has been fairly active in prescribing avenues for municipal activity (primarily in non-academic/grey literature), it remains to be empirically demonstrated how these issues are taken up by municipal governments as institutions, and by municipal actors themselves. In particular, little is known about the salience of the health inequities knowledge base among politicians and senior city staffers in Canadian municipalities, or the extent to which municipal policies and vision statements reflect complex understandings of population health. Are municipalities in Canada actively addressing health inequities within their jurisdictions? While actors within municipalities may perceive themselves to have limited capacity as individuals to affect change, municipal government institutions have the capacity to address an array of determinants of health, such as physical activity, physical environment, healthcare services, and early child development. Yet, can municipalities address the health gradients that arise from inequitable experiences with these SDOH? What types of municipal policies redistribute resources in a progressive fashion? And, what types of policies may actually reinforce existing health inequities? These are questions worth pursuing if Health Canada's SDOH framework is going to be applied to population health policy.

1-1.5 Importance and Capacities of the Municipal Level in Addressing Health Inequities

Population growth in Canada is occurring predominantly in urban agglomerations, with 45% of the country's current population living in one of six

large metropolitan regions (Statistics Canada 2007). Acting as socio-spatial sorting mechanisms, urban systems consist of socio-economically homogenous neighbourhood units (Harvey 1973), whereby social gradients in health persist across these neighbourhoods (Diez-Roux, Nieto et al. 1997; Kaplan 1998). Additionally, more recent evidence from the field of urban health has illuminated the detrimental impacts of suburban sprawl on population health outcomes (e.g., high rates of obesity, mental illness, and respiratory problems) (Frumkin 2002; Saelens, Sallis et al. 2003; Frank, Andresen et al. 2004; Yang, Chen et al. 2004; Galea, Ahern et al. 2005; Lopez and Hynes 2006). Thus, social gradients in health can be created and exacerbated when municipal governments are unable to plan, deliver, and manage equitable and viable spaces to live amidst rapid population growth. Given these trends in urban growth and land-use patterns, it seems likely that the policies and plans implemented by municipal governments are important components of the larger project of addressing population health inequities.

It is reasonable, then, to investigate the potential roles municipal governments can play in addressing these inequities. Population health outcomes are rooted in the social geographies of everyday life, many of which are manifested at the local level: from the spaces in which our daily routines (i.e., work, school, commerce, play) are conducted, to our location in the socioeconomic gradient (i.e., class position), to our (social, political, biological) responses of socioeconomic position vis-à-vis our sense of place and identity (Kearns and Moon 2002). Because of their spatial proximity to these locally-

based social geographies, municipalities are also well positioned to mitigate (or reinforce) socioeconomic inequalities in health through land-use decisions, zoning by-laws, economic development incentive programs, urban design standards and processes, affordable housing programs, poverty reduction strategies, public transit, and other policies and programs that redistribute public goods in a socio-spatially equitable manner (McCarthy 2002). Urban regimes, and similar growth coalitions, for instance, demonstrate the potential for productive relationships between elected municipal officials and stakeholders in private industries like development and real estate (Stone 1989). Indeed, Northridge, Sclar et al. (2003) contend that urban structures offer the best domains through which to tackle health inequalities:

> [T]he impact of the built environment is especially subject to policy manipulation…these types of interventions may have the greatest potential benefit for improved population health and well-being. (560)

Despite the important role municipalities can play in addressing health inequalities, what capacity do they have to carry out such a task? At first glance, it may appear that this capacity is quite limited. The legitimacy and authority of Canadian municipalities has been marginal since the *Constitution Act, 1867*, when it was declared that only two orders of government (federal and provincial) existed (Sancton 2000). Since municipalities are not formal orders of government, they have assumed an inferior governmental position in Canada; they are viewed as creatures of the province with no independent autonomy and only responsible for duties conferred upon them by their respective provinces. Sancton (2000) summarizes the responsibilities of Canadian municipalities as:

> [F]ire protection; local roads and streets; the collection and disposal of residential solid waste; sewage systems; the taxation of land and buildings; and the regulation of local land use…municipalities are the units of government concerned with regulating, servicing, and taxing our built environment. (427)

In addition to possessing highly discrete responsibilities, municipalities have very limited revenue generating capacity, relying to a great extent on property taxes (Davis and Sandman 1998; Frohlich, Ross et al. 2006). Consequently, municipal governments are torn between their need to keep property taxes sufficiently low to retain wealthy residents within their jurisdictions (Royer 1998; Freudenberg 2000), and high enough to provide services to the large number of needy residents that tend to concentrate in cities where services are delivered (Davis and Sandman 1998). Discursive shifts also underpin the constraints municipalities endure in creating 'healthy public policy'; taxpayers increasingly see themselves as victims, reducing their compassion for the welfare of distant strangers (Brown 1998). Meanwhile, the public and non-profit services designed to assist vulnerable populations are increasingly privatized or undervalued (Royer 1998; Rupp 1998). The resulting socio-political climate leaves municipalities little room to manoeuvre to tackle social gradients.

Despite these constraints, urban health scholars believe municipal governments are a fundamental component of the battle against population health inequities. Indeed, there is a growing body of literature that is calling for reconnecting public health and urban planning, and assigning greater responsibility to municipal governments in the process (McCarthy 2002; Northridge, Sclar et al. 2003; Corburn 2004; Boarnet and Takahashi 2005).

Cities possess numerous characteristics that would facilitate this reconnection (Glouberman, Gemar et al. 2006): while they have large poor populations, most also have large proportions of wealthy residents with significant power and authority in the city; they are often the sites of major hospitals, universities, think tanks, and influential non-governmental organizations; they tend to possess a well-organized public health sector; and they are more likely than their rural counterparts to have organized interest groups with powerful communication skills and significant capacity to mobilize. Described by Glouberman et al. (2006) as *complex adaptive systems*, cities offer promising sites for interventions on health inequities because of the combined opportunities for top-down policy interventions delivered by municipal governments, and bottom-up participation from potentially engaged, mobilized, and knowledgeable communities.

1-2 THEORETICAL FRAMEWORK

1-2.1 Overarching Theoretical Perspective

The line of inquiry described thus far incorporates concepts, literatures, and assumptions from academic disciplines that include geography, health sciences, and public policy. By focusing on the *perspectives* and *experiences* of individual municipal actors (e.g., politicians, policy-makers, and planners), a strictly humanist approach would be insufficient in illuminating how municipal governments, as institutions, can act as redistributive socio-political structures to reduce health inequities within their jurisdictions (Gregory 2000a). Meanwhile, because of its strong anti-humanist and anti-empiricist orientation (Gregory 2000b), an exclusively structuralist approach offers limited utility for this research, as it would not generate access to the unique and informative voices of municipal actors that would be granted by an empirical endeavour. Despite the weaknesses associated with using them exclusively, both approaches offer some purchase for this research program: humanism, for understanding the exercise of human agency within institutional and organizational constraints; and structuralism, for conceptualizing municipal governments as potentially redistributive institutional structures.

As an epistemological middle-ground between humanism and structuralism, this research program adopted the philosophy of pragmatism. Drawing on Barnes' (2000a) conceptualization of this philosophy, pragmatism is

considered to be anti-foundational[10], views knowledge as fallible and truth as ever-changing, believes in the value of communal enquiry (i.e., sharing of ideas and responsibilities within a broader scholarly community), and believes that change, while often driven by emergence of new information, can also arise serendipitously.

1-2.2 Political Economy

Political economy is concerned with the production and distribution of surplus wealth (Barnes 2000b), and when applied to geography, this perspective allows one to investigate how the political and economic relationships inherent in capitalism are "spatially and environmentally constituted" (Smith 2000: 486). As income inequalities deepen across Canada, and epidemiological evidence continues to surface regarding the detrimental impacts of these inequalities on population health outcomes, the need for such analyses has also intensified. Indeed, some health inequities researchers have already taken up the charge, applying political economy perspectives to their work (Navarro 1999; Townson 1999; Wermuth 2003; Raphael, Bryant et al. 2006). According to Wermuth (2003),

> "Political economy" embraces considerations of global political and economic forces, the state, government, social classes, public administration, policy making, and the distribution of resources between and among populations…[It] adds the dimension of power

[10] The anti-foundationalism of pragmatism is of particular utility for this research. While social gradients in the health of Canadians are a current reality, the establishment of these gradients is historically contingent and their maintenance is not absolute. Levels of income inequality vary considerably across jurisdictions, as do their corresponding health inequities (Lynch, Kaplan et al. 1998; De Vogli, Mistry et al. 2005). Thus, the magnitude of health inequities is subject to change (Marmot 2004), so long as sufficient political will and energy exist to intervene on the underlying socioeconomic inequities (Rorty 1998).

> as institutionalized and wielded by a variety of social groups, organizations, and agencies. These institutional arrangements affect individuals' lives and health in many ways. (21)

In this research program, political economy offers a critical perspective for understanding how *municipal governments* can employ redistributive policies to reduce gradients in the socioeconomic conditions of daily living. Political economy perspectives have long held utility for human geographers, from Harvey's early analysis of urbanization and capital accumulation (Harvey 1973), to more contemporary analyses of uneven economic development (Goodwin 2004). Guided by Harvey's analysis of socio-spatial inequities in cities (Harvey 2001), and Clark's analysis of the redistributive functions of the *local state*, (Clark and Dear 1984), the political economy analysis will ask the following questions:

- Are socio-spatial health inequities acknowledged by municipal governments?
- How do municipal governments explain the determinants of these health inequities?
- What redistributive functions are implicated for municipal governments in reducing health inequities?
- How receptive are municipal governments to engaging in these redistributive functions?
- What role(s) do municipal governments assume in reducing socio-spatial inequities?
- What challenges do municipal governments face in assuming this role(s)?

1-2.3 Power

As population health research has demonstrated, health inequities are the products of the unequal distribution of societal power (Marmot 2004; Wilkinson

2005). As well, the extent to which municipalities can mediate health inequities relates both to their power to act within a number of constraints, and their power to affect the necessary changes within the populace to achieve reduced inequities. Thus, two divergent perspectives on power are relevant to this research: 'power to control others' and 'power to achieve something'.

The traditional perspective – 'power to control others' – views power as a characteristic of asymmetrical relationships that is used by *power-holders* to invoke a desired outcome from their subjects (Ledyaev 1997). The more contemporary perspective – 'power as capacity to do something' – challenges the traditional zero-sum definitions of power, and instead views power as separate from manipulation and coercion, an instrument of common will, and entrenched within the disciplinary boundaries of expert knowledge (Ledyaev 1997). Both of these concepts of power – which aid in understanding conflicts between people and in understanding the organization of everyday life – were employed in this research, and guided the following questions:

- How can/do municipal governments assert 'power over others' to address health inequities (i.e., municipal governments as objects of power)?
- How can/do other governments assert power over municipalities to address health inequities (i.e., municipal governments as subjects of power)?
- How can/do municipal governments invoke power as an instrument of common will to address health inequities?
- How does power, as entrenched in expert knowledge, influence municipalities' ability/capacity to address health inequities?
- How are municipalities' capacities to reduce health inequities differentially shaped by individual versus institutional agency?

1-2.4 Public Policy and Planning

Dating back to the 'decisionist approach' employed by policy think-tanks (e.g., RAND Corporation) during the Second World War (Majone 1989), the classic model of the public policy process assumes that policy actors are utility-maximizers, making rational decisions in a methodically and scientifically rigorous manner. The underlying assumption of this rational, linear model is that perfect information (i.e., research evidence) is readily available and forms the basis of all public policy decisions. Using a cyclical framework, Howlett and Ramesh (2003) adapted the classic rational model into a model of applied problem solving, with the following components: problem definition, developing alternatives/policy-making, decision-making, implementation, and evaluation.

Likely owing to its strong biomedical and epidemiological origins, it is the classic rational model that has been most commonly adopted by health inequities researchers (Fafard 2008). Thus, in this research program, each component of Howlett and Ramesh's (2003) cycle of applied problem solving was given due consideration by drawing on key scholarly works: literature on agenda-setting dynamics, which relates to the first two stages of the cycle (Kingdon 1995; Soroka 2002); literature pertaining to decision-making in general (Lindblom 1956; Stone 2002), and the city in particular (Villeneuve and Seguin 2000); and literature on implementation through the use of policy instruments (Schneider and Ingram 1990; Bressers and O'Toole 1998), and the engagement of non-governmental actors (Stone 1989; Clavel, Pitt et al. 1997).

Political economy is concerned with how resources are distributed across populations (Savitch and Kantor 2002), and planners are charged with the responsibility of putting abstract policy and planning ideas into practice, involving the redistribution of public resources (Friedmann 1987). Of the four traditions of planning theory outlined by Friedmann (1987), the *social reform* tradition was most relevant to this research: this planning tradition views governments as indispensable for "the promotion of economic growth, the maintenance of full employment, and the redistribution of income" (77). Viewed as upholding the principles of the 'public interest', democracy, human rights, and social justice (Friedmann 1987), the social reform tradition of planning is commonly ascribed to in the 'healthy urban planning' literature (Duhl and Sanchez 1999; Barton and Tsourou 2000; Barton, Mitcham et al. 2003; Takano 2003).

Thus, the public policy and planning literatures were considered in formulating the following questions:

- How can/do municipal governments negotiate the various stages of the public policy cycle to address health inequities?
- Do municipal governments employ the social reform tradition of planning in addressing health inequities?[11]

[11] It is important to note that the questions posed in each theoretical section do not pertain only to the literatures to which they are associated (i.e., political economy, power, and public policy & planning). The questions that were formulated to evoke concepts from the political economy literature, for instance, may also implicitly tap concepts from the power or public policy literatures. These questions are meant to serve merely as guides for the theoretical reflections made in the analyses of, and inferences made from, the research findings.

1-3 CONCEPTUAL FRAMEWORKS

1-3.1 Conceptualizing the SDOH

The SDOH, which emerged largely out of the population health literature in the early 1990s, offer a useful conceptualization of the array of medical and non-medical factors that mediate social gradients in health. The complexity of these determinants (and their relationships to one another) has given rise to a number of conceptual frameworks and heuristic devices over the years.

One of the earliest such frameworks to emerge was developed by Evans and Stoddart in 1990. This contribution was seminal as it marked the first attempt to conceptualize the complex inter-relationships between the determinants of health and health outcomes. Displayed below in Figure 1-1, this framework not only illuminates the importance of medical and non-medical determinants on overall *well-being* and *prosperity*, but it also demonstrates, using a series of feedback loops, the influence of these outcomes on the determinants themselves. For instance, chronic diseases can influence overall sense of well-being and could lead to engagement in health-damaging coping mechanisms (e.g., cigarette smoking). Similarly, the quality of one's physical environment (e.g., housing and working conditions) is simultaneously a product of wealth and social status (i.e., prosperity) and a producer of health outcomes (e.g., asthma, injuries). Thus, Evans and Stoddart's framework provides a useful starting point for understanding the complexity of the SDOH.

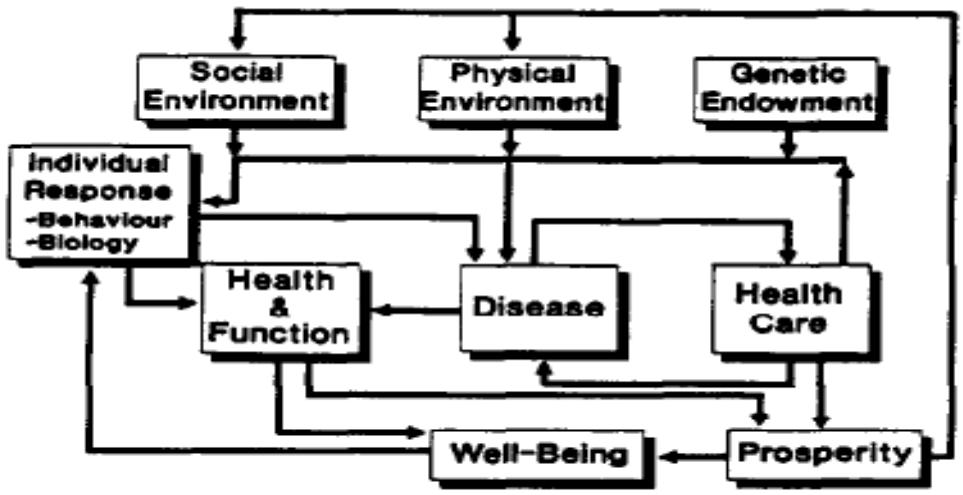


Fig. 5

Figure 1-1: Evans and Stoddart's (1990) conceptual framework for the determinants of population health.

1-3.2 Incorporating Spatial and Temporal Complexity

A major weakness of Evans and Stoddart's framework is that it fails to describe the importance of time and space in the relationships between the SDOH and health outcomes. One of the defining features of the population health approach is that it adopts a lifecourse perspective (Marmot 1997); that is, health determinants, especially early childhood development, are understood to influence the health of populations in varying degrees of intensity across the lifespan (Power and Hertzman 1997). Education is an especially relevant determinant for younger generations, employment conditions for working age populations, and healthcare for the aged, suggesting that understanding the SDOH requires consideration of how these determinants influence populations diversely at different points in time.

The SDOH are also influential at different spatial levels. Some determinants have a highly proximate influence on health outcomes, such as personal health practices, while the influence of other determinants of health, such as employment status, is more distal. The spatial perspective is particularly relevant in understanding the role of policy interventions in mitigating the harmful effects of these determinants. Smoking cessation programs, for instance, are typically targeted at the level of individuals and their behaviours, while income redistribution is a population-wide taxation policy that is carried out at provincial and national levels. Thus, spatial dimensions, and the embeddedness of these dimensions, are of particular importance in understanding how health is shaped by, and how best to address, these SDOH.

Another problem with Evans and Stoddart's framework is that it portrays the relationship between the SDOH and health outcomes as rational, linear, and aetiologically simplistic. In reality, the correspondence between social structures and health outcomes is often unclear and indirect[12]. While this relationship generates clear and predictable empirical patterns, attempts to understand its aetiological pathways are fraught with uncertainty and complexity. For instance, low income is consistently associated with poor health outcomes; however, it is unclear whether these health outcomes are the product of low income or whether income is a proxy for some underlying dimension of deprivation. Similarly, the mobility of populations makes it especially difficult to attribute spatial characteristics to health outcomes. The heuristic device created by Kaplan in

[12] Although the term 'social *determinants* of health' would suggest otherwise.

Figure 1-2 usefully depicts the complex dimensions of time, space, and the determinants of population health (Kaplan 2004).

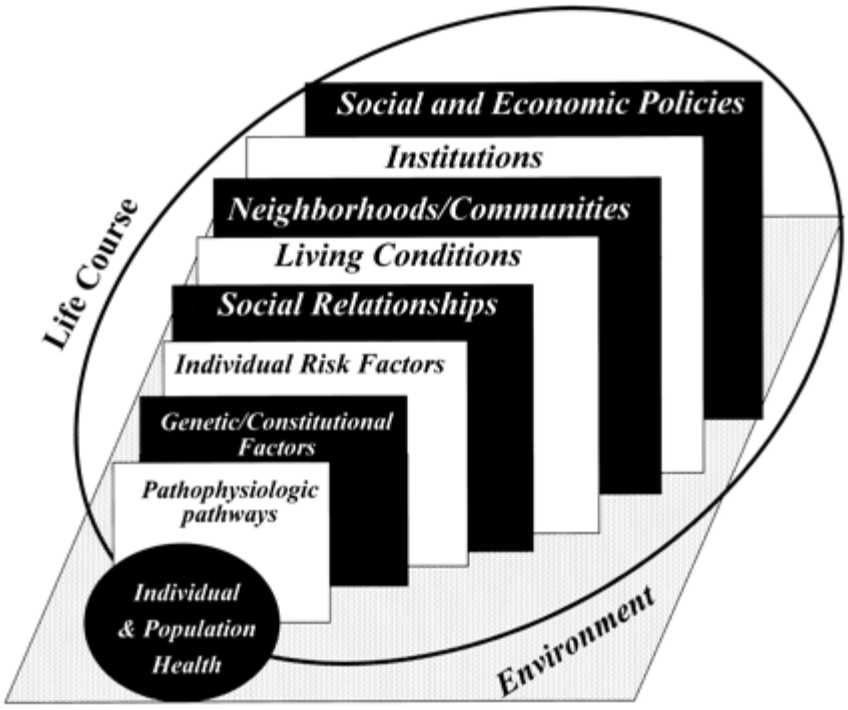


Figure 1-2: Kaplan's (2004) heuristic for understanding the influence of time and space on the SDOH

1-3.3 Fleshing Out the SDOH Framework in Space and Time

Kaplan's heuristic prominently considers the lifecourse perspective operant at varying dimensions of spatial organization. A key limitation of this device is that it fails to describe these spatial dimensions, and how the SDOH are manifested within and across these dimensions. For example, what does Kaplan mean exactly by 'Neighborhoods/Communities' or 'Institutions'? Schulz and Northridge (2004) developed a conceptual framework detailing the relationship between the SDOH and environmental health promotion, which offers substance

to the spatial dimensions, alluded to by Kaplan. While tailored to environmental health promotion, Figure 1-3 has utility for understanding how to improve the health of urban populations, especially through the intermediate and proximate levels of spatial organization.

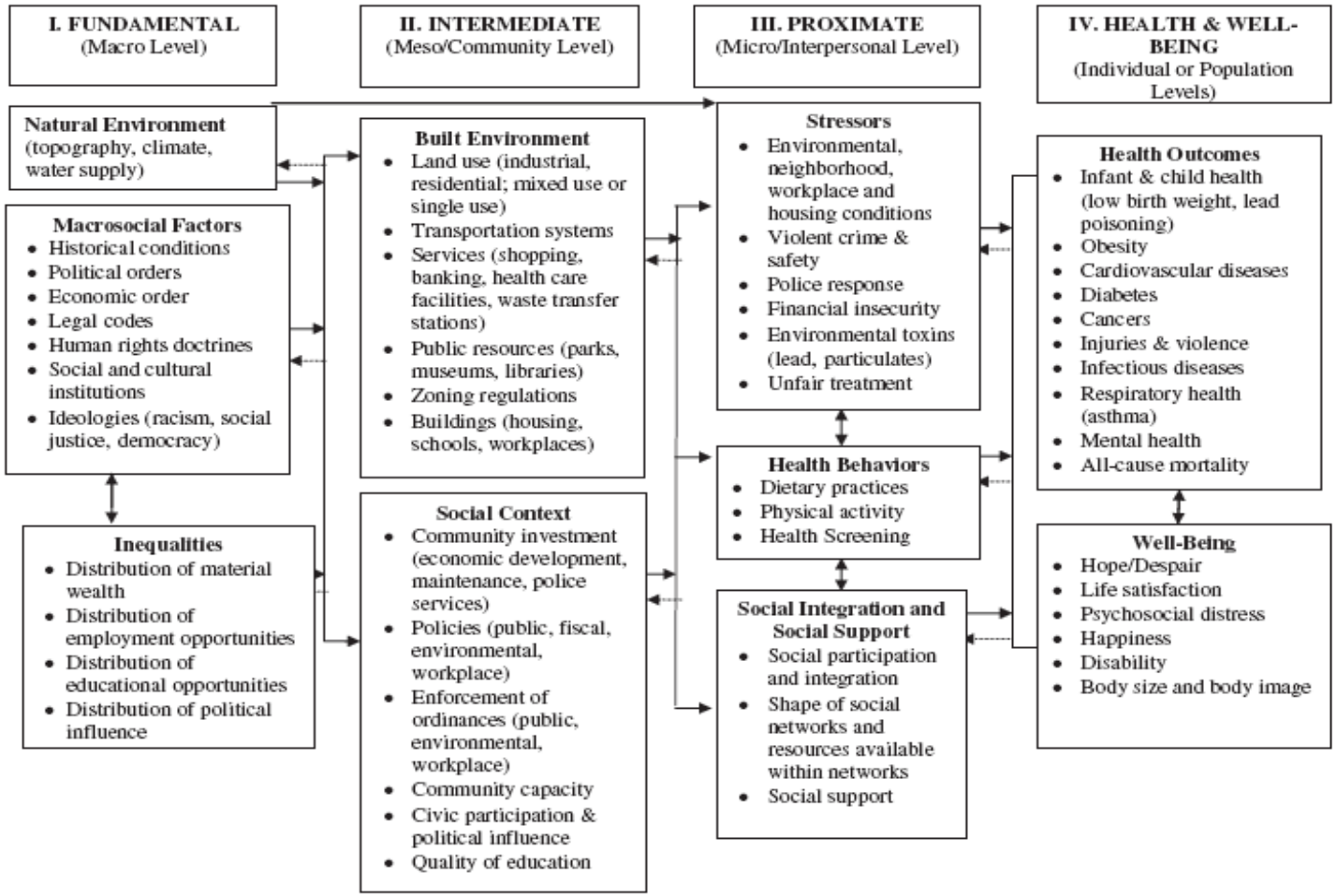


Figure 1-3: Schulz and Northridge's (2004) conceptual framework for environmental health promotion

1-3.4 Identifying a Niche for Municipal Governments

Schulz and Northridge's framework offers explicit detail on the determinants of environmental health promotion (and implicitly, population health inequalities) operant at the macro, meso, and micro levels of space and time. As suggested from this framework, municipal governments are *fundamental* in directly shaping the SDOH at the intermediate level. Through the 'built environment' and the 'social context', municipal governments have a number of policy levers with which to affect change in downstream population health and well-being outcomes.

A similar framework developed by Galea, Freudenberg et al. (2005) identifies a policy niche for *municipalities* in addressing the SDOH within a wider geographical system. This framework, shown in Figure 1-4, illustrates the broad dimensions through which municipalities can affect change (i.e., government, markets, civil society), a potential domain of intervention (i.e., public health), and the constraints imposed by higher-level trends, such as urbanization and immigration. One weakness of this framework is that it focuses exclusively on public health intervention, and fails to consider the potential for interventions to address the SDOH from other domains (e.g., urban planning, law enforcement, housing). Despite this weakness, this framework is novel in its explicit consideration of the role of municipalities in alleviating population health inequities.

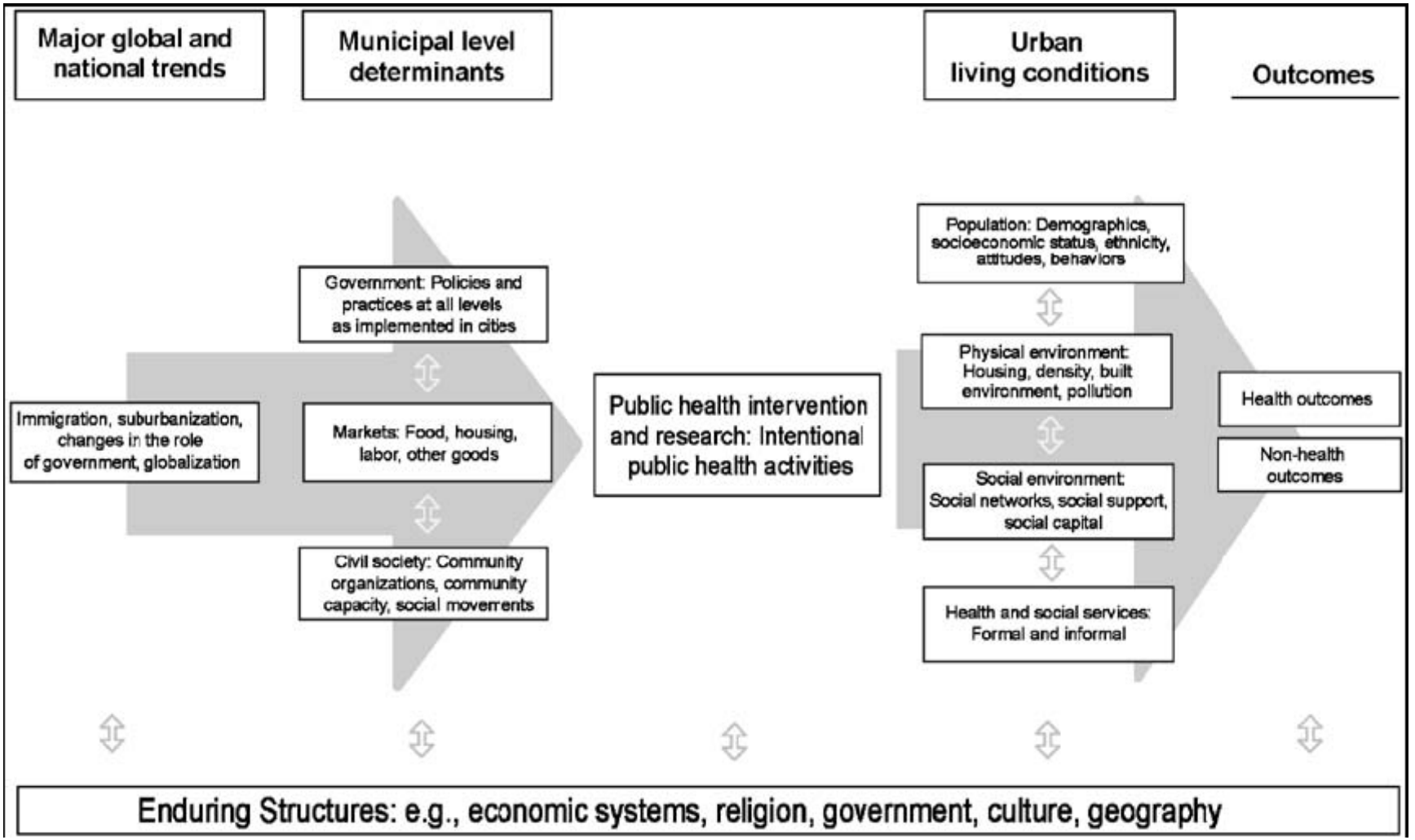


Figure 1-4: Galea, Freudenberg et al. (2005) conceptual framework for the role of municipalities in addressing the SDOH

1-3.5 Unanswered Questions Concerning Roles of Municipalities

These frameworks have evolved considerably since Evans and Stoddart's first conceptualization of the SDOH in 1990.[13] The strength of this first framework was its recognition of the iterative nature of the relationships between the SDOH and population health outcomes, yet it failed to account for space and time. Kaplan's device incorporated these elements, but remained quite broad in scope, offering few details on precise policy implications of these relationships. Schulz and Northridge's framework is the most detailed of the four, but was oriented to environmental health promotion, and is not necessarily directly applicable to population health inequities. Finally, the framework by Galea and colleagues specifically implicates the municipal level in the task of improving urban health outcomes, but is scant on detail concerning specific policy levers for municipalities in addressing health inequities. Therefore, there are a number of unanswered questions concerning municipalities and population health inequities.

[13] A number of heuristic frameworks have been developed over the past 20 years attempting to simplify the highly complex relationship between the conditions of daily living and the health of populations. As such, an exhaustive analysis of frameworks has not been presented here.

1-4 RESEARCH QUESTIONS

1-4.1 Phase 1 → Conceptual Phase

The first phase of the research program was designed to be conceptual in scope, by examining academic discourses on health inequities to elucidate *prescriptions* for municipal intervention. This phase was guided by the following research question:

> How has the health inequities knowledge base[14] implicated municipal governments in the task of reducing population health inequities?

1-4.2 Phase 2 → Exploratory Phase

The second phase of the research program was designed to explore the *capacities* of municipal governments in Metro Vancouver to address health inequities, based on the awareness, attitudes, and opinions held by influential actors in those governments. This phase was guided by the following research question:

> How do municipal government actors[15] in Metro Vancouver understand and conceptualize solutions to health inequities in their jurisdictions?

[14] Health inequities knowledge base = health promotion, Healthy Cities, population health, and urban health

[15] Municipal government actors = mayors, city councillors, staff and board members representing all sectors

1-4.3 Phase 3 → Analytical Phase

The third phase of the research program analyzed the *intentions*[16] of municipal governments in Metro Vancouver to address health inequities, based on their visions for community planning and development. This phase was guided by the following research question:

> How has the health inequities knowledge base permeated the community planning visions of selected Metro Vancouver municipalities?

[16] The third phase examined municipal governments' *intended*, as opposed to *actual*, activities to reduce health inequities, because only municipalities' community planning vision statements were selected for analysis. The primary interest of this research program concerns translation of the health inequities knowledge base to the municipal domain in Canada, especially in terms of how responsibilities for reducing health inequities are conceptualized at the individual and institutional level in municipal governments. Identifying 'actual activities' by municipal governments on reducing local health inequities is a very complex task, because failure to observe such activities can yield inconclusive findings (i.e., municipal governments may fail to reduce health inequities, not because they have inadequately considered these issues in their policy visions, but rather, because of problems with implementation of these visions). Thus, achieving conclusive findings would have required analyses of vision statements as well as gathering a range of evidence, of varying availability, to confirm or disconfirm whether municipal activities are actually reducing health inequities. Such analyses would have gone far beyond the scope of this dissertation, let alone one component of the research program.

CHAPTER 2: METHODS

2-1 METHODOLOGICAL FRAMEWORK FOR DISSERTATION

The research objectives were pursued using a mixed methods approach, and guided by the middle-ground theory of pragmatism. Tashakkori and Teddlie (1998) argue that pragmatism "presents a very practical and applied research philosophy" which concentrates on matching the most appropriate methods to the research questions (30). Since pragmatism does not privilege one particular methodological approach over another, it offers a useful philosophical framework for guiding mixed-methods research programs. In the case of this research program, the substantive interests in municipal policy-making and planning are 'practical' and 'applied', and the analytical needs to solicit both individual- and institutional-level perspectives require implementation of a variety of methodological techniques.

According to Tashakkori and Teddlie (1998) pragmatism differs from (post)positivism and constructivism in a number of ways: it assigns equal value to both quantitative and qualitative methods; it can incorporate both inductive and deductive logic; it acknowledges that values play a significant role in the research process; it accepts the existence of an external reality; and it believes that causal associations can exist, but may never be clearly articulated. Figure 2-1 below displays their model for the mixed methods research cycle, with specific attention paid to the logic of reason. In the context of this research program, the literature reviewed in phase one generated expectations for municipal roles in addressing local health issues, which informed the survey development for phase two. Additionally, the results of the literature review and the survey informed phase

three, by illuminating policy documents and themes worthy of in-depth analyses. Phase three observations regarding existing municipal efforts to address local health issues in selected Metro Vancouver municipalities helped to inform the original theory by illuminating the types of roles that municipalities typically assume.

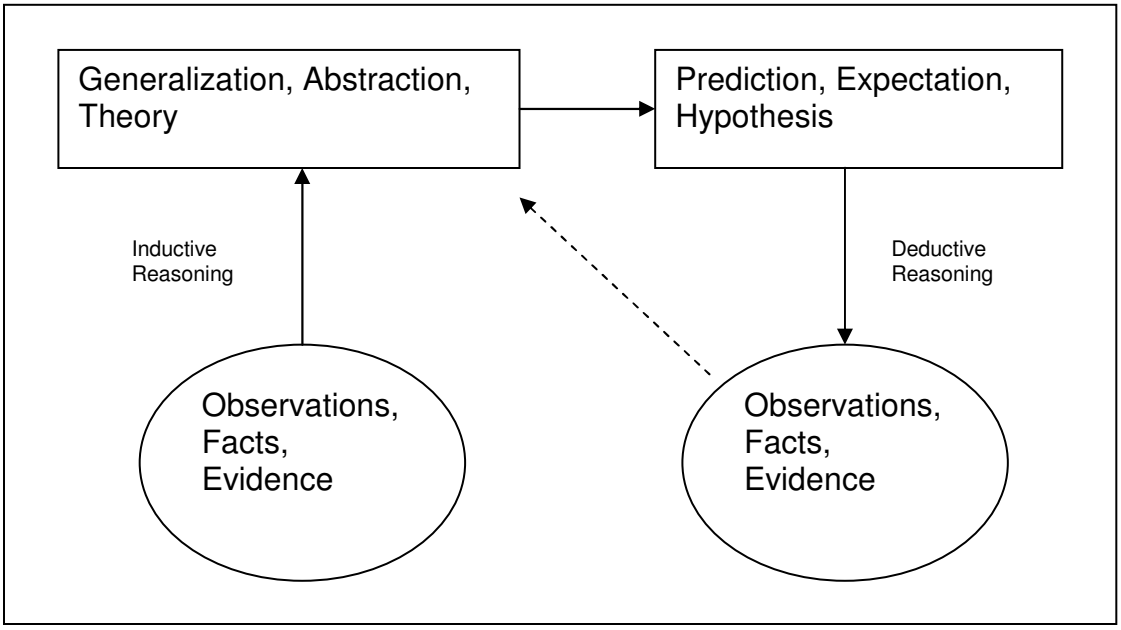


Figure 2-1: The Mixed Methods Research Cycle (Tashakkori and Teddlie 1998: 25)

2-1.1 Purpose for Using Mixed Methods Design

According to Greene et al. (1989), there are five purposes for using mixed methods data collection techniques: triangulation, complementarity, development, initiation, and expansion. Earlier phases of the research facilitated the methodological *development* of subsequent phases, while subsequent phases generated potentially contradictory observations (i.e., *initiation*) and *expanded* the scope of inquiry. The employment of multiple methods also helped

to confirm findings generated from each phase (i.e., *complementarity*) and reinforced the overall validity of the research findings (i.e., *triangulation*).

2-1.2 Components of this Mixed Methods Study

The components of this mixed methods study were dictated by the objectives and research questions (section 1-4), and are depicted in Figure 2-2. The first phase of the study employed a meta-narrative approach. This approach involved the review of a large quantity of qualitative data (i.e., journal abstracts) and the thematic conversion of some of these data into numerical values for analysis of this broad dataset (QUAL → QUAN + qual). The second phase of the study employed a mail-administered survey. The survey was primarily quantitative in scope, although a number of open-ended questions were also included in the instrument (QUAN + qual). The third component of the study was an in-depth analysis of policy documents from selected Metro Vancouver municipalities. Documents were coded and analysed qualitatively along key themes identified in phases one and two, with calculations of code frequencies constituting a small quantitative component (QUAL + quan).

2-1.3 Implementation of Data Collection Components

The three data collection components were implemented sequentially, with slight overlaps in the data collection timeframe for each. Figure 2-2 below depicts the three phases of data collection and the relative emphases placed on the quantitative and qualitative components of data collection within each phase (Tashakkori and Teddlie 1998). It is worth noting that the temporality of data

collected for each phase does not follow the temporality in which the data became available: phase one collected data generated from 1986 to 2006; phase two collected opinion data in 2007; and documents reviewed in phase three were written in the late 1990s.

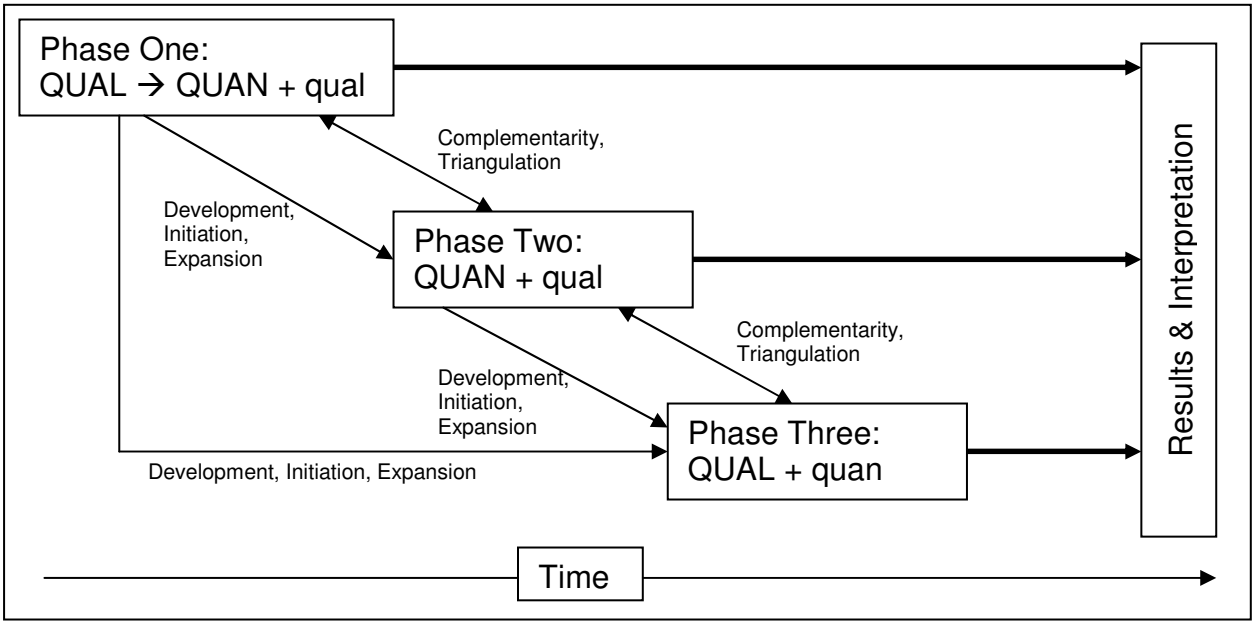


Figure 2-2: Diagram of Data Collection Phases and Purposes for Each Phase

2-1.4 Ethics Approval

The application for ethics approval for research conducted with human subjects was completed and submitted to Simon Fraser University Ethics Review Board on October 3rd 2007. The application was written after commencement of the literature review for phase one, and the development of a draft survey instrument for phase two. The study was deemed minimal risk and ethics approval was granted on October 16th 2007.

2-2 LITERATURE REVIEW METHODOLOGY

The literature review was conducted using 'meta-narrative mapping' – the process of "plotting how a particular research tradition has unfolded over time and placing this dynamic tradition within a broader field of enquiry" (Greenhalgh 2004: 349). This novel methodological approach combines the analytical dimensions of traditional narrative research – storytelling, historicity, context, and human relations – with the comprehensiveness and rigor pursued in systematic literature reviews (Muller 1999; Greenhalgh 2004). According to Greenhalgh (2004), comprehensive literature reviews, especially those pertaining to public policy issues, often employ unfocussed research questions, are inter-disciplinary in scope, see value in 'flawed studies', and are unlikely to reach a single, unified message (352). As such, meta-narrative mapping offers a richer, contextual, and fulfilling alternative to the more restrictive approach of systematic reviews, by incorporating five key principles (372-4):

1) Pragmatism – exploratory, rather than systematic, searching;
2) Pluralism – valuing diverse ideas and communicating this diversity;
3) Historicity – acknowledging an underlying narrative that follows a sequence of events;
4) Contestation – recognizing the paradigmatic assumptions of the reviewer; and
5) Peer review – discussing findings with researchers from different disciplines.

In this literature review, meta-narratives of four bodies of literature (section 2-2.2 – Bodies of Literature) from the broader field of enquiry on health inequities were examined and plotted over a twenty-year timeframe. Several narratives within these bodies of literature were of analytical interest, and were investigated

using the template style for organizing qualitative data (Miller and Crabtree 1999). In this organizing style, codebooks are used as the "organizing system for entering the text and identifying units of interest for further analysis and interpretation" (135). By extracting key themes, codebooks are of particular utility in synthesizing and summarizing large quantities of qualitative data (Crabtree and Miller 1999). While the foundation for the codebook was developed *a priori* (i.e., key variables of analytic interest), the 'flesh' of the codebook was developed iteratively after engaging in immersion and crystallization with the dataset (section 2-2.3 – Development of Abstract Codebook) (Addison 1999).

2-2.1 Literature Review Parameters

The first step in examining the literature was to set parameters for the review. Parameters were set for the electronic databases to be employed, the review timeframe, and limits for the search strategies.

Database Selection

Three electronic databases were selected for the literature search: PubMed, which caters to life sciences, and includes most health sciences journals; Sociological Abstracts which caters to sociology, social science, and policy science, and includes health policy, social policy, and health geography journals; and Web of Science, catering to science, social science, and arts. Web of Science was the most comprehensive of the three databases, capturing articles not found in PubMed or Sociological Abstracts.

Timeline

The timeframe for the literature review was 1986 to 2006 inclusive. Two seminal publications – the Ottawa Charter for Health Promotion (WHO 1986) and the Epp Report (HWC 1986) – relevant to the establishment of health inequities discourse were released in 1986, and 2006 marks the 20-year anniversary of the publication of these reports. As searches were conducted in the year 2007, using the 2006 end date for the review ensured all publications in the previous year were captured.

Search Limits

To generate more relevant search results, limits were employed in search strategies for all three databases. For the PubMed searches, the limits were human subjects[17], English language, and search terms found in the title or abstract. Sociological Abstracts limits were journal articles, English language, and search terms found in the abstract. Web of Science limits were journal articles, English language, and search terms found in the topic.

2-2.2 Process for Literature Search

The literature search process was complex, involving three electronic databases, four bodies of literature, and close to fifty search terms. Searches were first performed in PubMed, followed by Sociological Abstracts, and Web of Science, and complete searches were performed on each body of literature before moving from one database to the next. Individual searches were guided

[17] As opposed to 'animal subjects', as this is database also consists of biomedical articles.

by a search strategy schematic (Figure 2-3), and involved the following procedure: keywords for literature body were entered into the search field of the electronic database, and combined with keywords for two of the four themes of interest (until all six permutations of the two-theme combinations were searched).

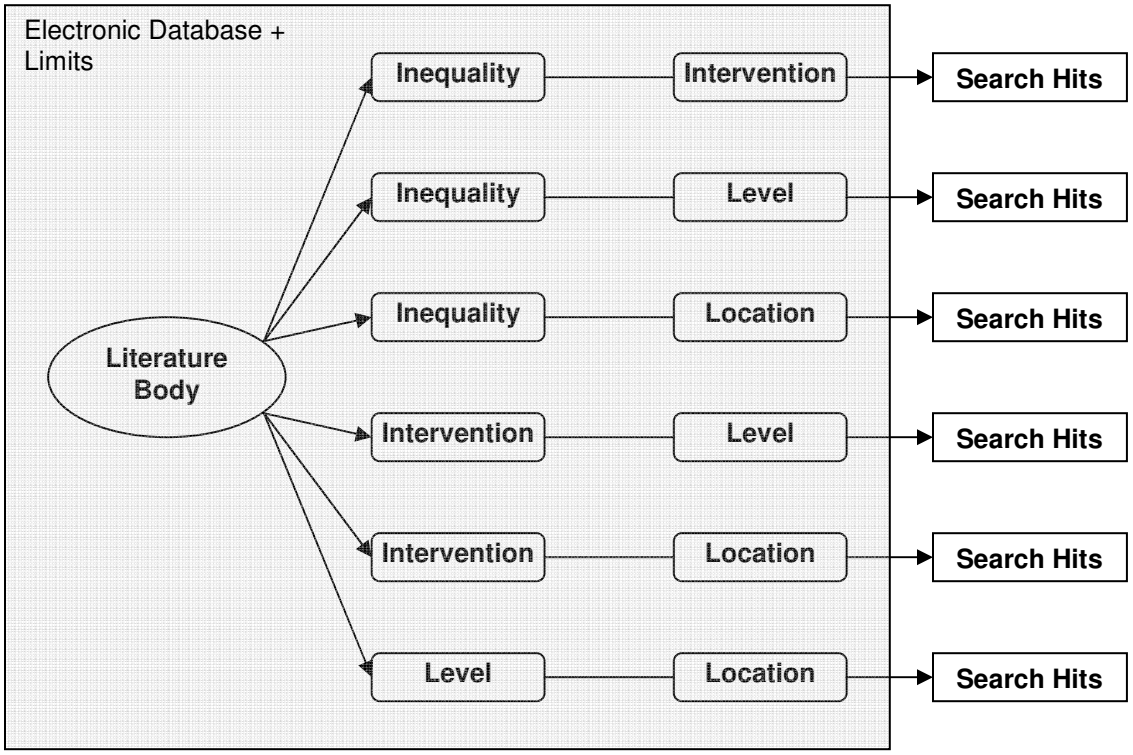


Figure 2-3: Literature Search Strategy Schematic

Bodies of Literature

Based on the general trajectory of health inequities research over the past 20 years, the decision was made to examine four (unofficial) bodies of literature: Health Promotion (HP), Healthy Cities (HC), Population Health (PH), and Urban Health (UH). Health promotion is the oldest body of literature of the four examined, with roots in social justice and health inequities (WHO 1986), and a practical orientation towards encouraging healthy lifestyles (Love and Thurman

1991; O'Neill and Pederson 1994). The HC literature was spawned from Health Promotion, with the corresponding 'movement' originating in Canada (Flynn 1996). This literature focuses on empowerment strategies to facilitate community participation to address local health problems (Flynn, Ray et al. 1994; Goldstein 2000). Population Health emerged in the early 1990s. This body of literature is rooted in epidemiology, has empirically established social gradients in health, and espouses top-down, policy-driven approaches to reducing health inequalities (Marmot, Smith et al. 1991; Wilkinson 1992; Evans and Stoddart 2003). The fourth body of literature, UH, is similar to PH in its positivist and epidemiological roots (Galea and Vlahov 2005a). This body deals primarily with disease-specific issues affecting urban, and especially inner-city, populations, and focuses on public health interventions to reduce disease burdens (Galea and Vlahov 2005a; O'Campo and Yonas 2005).

Search Themes and Terms

The development of search themes was driven by four general areas of research interest. These include population health inequities (INEQUITY), government-based interventions to address health inequities (INTERVENTION), interventions from municipal governments on issues related to health and well-being (LEVEL), and Canadian locations for research and/or interventions on health inequities (LOCATION). Articles of greatest interest were those that discussed the (potential) roles of Canadian municipal governments in addressing health inequities in their jurisdictions. A comprehensive list of search terms was generated for each of these areas of interest (see Appendix 1).

Search Strategy

Searches were performed by following the strategy schematic described in Figure 2-3. Databases were activated, limits were applied, and appropriate search terms, along with one of the four bodies of literature, were entered into the search engines. The strategy of searching for one body of literature and two search themes was most fruitful, as this level of searching generated a substantial number of abstract hits with sufficient relevance to the research topics of interest to warrant review. Searches within each body of literature using only one search theme generated far too many abstracts to review (over 3000) with irrelevant information, while searches within each body of literature with more than two search theme generated too few abstracts (less than 300) to provide a broad account of the health inequities literature since 1986. Abstract hits from the latter strategy (i.e., more than two search themes) were captured in the simpler search strategies anyway.

2-2.3 Management of Search Results

A total of 72 searches were performed (3 databases x 4 bodies of literature x 6 search theme combinations), generating over 1600 abstract hits for review. Abstract hits generated by each search were pasted onto the electronic database clipboard to facilitate export of the abstracts and corresponding bibliographic information. Seven text files were generated for each body of literature from each database: one file for the complete, synthesized list of abstract hits, and six other files generated for each search theme combination. Results from the six themed searches were not mutually exclusive; thus, a

number of abstracts were generated in multiple themed searches. Using the complete files for each literature body, every individual abstract was reviewed for relevance, and if included, cross-referenced against the six themed searches for its content.

To facilitate review of the over 1600 hits, only abstracts, not full-text articles, were assessed. While this approach facilitated a *general* analysis of the contents of, and changes in, the health inequities knowledge base over time (i.e., the essence of meta-narrative mapping), considerable specific information that is typically not reported in abstracts would have been overlooked. In aiming for succinctness, authors of abstracts often omit details about the background for their article, the theoretical or epistemological perspectives upon which they base their arguments and research paradigms, the challenges associated with their methodologies, unique characteristics of populations under investigation, surprising or serendipitous findings, tangential (yet interesting and important) analyses and inferences, or the overall tone being conveyed in the article. In the context of this study, it is possible that municipalities were discussed in the full-text version of the article, but not in the abstract, leading to underreporting of the extent to which municipalities were implicated in the knowledge base. Additionally, reviewing entire articles and their associated bibliographies would have made it possible to track influential references over time, strengthening the overall discussion of the how the health inequities knowledge base has changed over time. Despite these weaknesses, reviewing abstracts was an empirically valid approach because abstracts emphasize the most important themes,

findings, and actors from the full articles upon which they are based, and the aim of this research phase was to extract only the *primary* contents of the articles.

Included abstracts were assigned a numerical identifier, coded using the abstract codebook, and inputted into an SPSS® database (version 15.0). Abstracts retrieved from the same body of literature but different databases were considered redundant, and not inputted in the dataset (e.g., Smith 2003, *Health & Place*, found in the PH literature, retrieved from both PubMed and Sociological Abstracts – only one of these abstracts was inputted). Repeat abstracts retrieved from different bodies of literature were inputted once for each body of literature from which they were retrieved, and assigned a secondary body of literature to track the recurrence (e.g., Smith 2003, *Health & Place*, found in PH and UH literatures, retrieved from PubMed – both of these abstracts were inputted).

Abstract Inclusion/Exclusion Criteria

A few inclusion criteria were employed. Abstracts had to be generated from one of the 72 themed searches, and were required to mention, in some capacity, *differences* in health outcomes or well-being, or the social determinants of health. Whether these differences were framed as inequalities, inequities, or disparities did not affect whether they were included in the review. Abstracts that discussed policy implications were also of distinct interest for review, but this was not an explicit inclusion criterion.

All exclusion criteria were developed *post priori*. Abstracts that described health differences in a strictly clinical scope were excluded, as were abstracts

that referred to inequalities or disparities in a different context (e.g., measurement disparities). Highly technical pieces that discussed new clinical technologies, or issues related to healthcare systems and/or delivery, were excluded. Abstracts were also excluded if they contained the words "National *Population Health* Survey" or "Ottawa Charter for *Health Promotion*", but lacked any other information relevant to the review.

Development of Abstract Codebook

In this study, a codebook was used to simplify and standardize the process of reviewing and synthesizing data. It facilitated the review of a large quantity of qualitative data, application of the same analytical standards to each entity within the dataset, categorization of corresponding information, and conversion of the information reviewed into a quantitative dataset (Crabtree and Miller 1999). While many variables of interest were identified and created *a priori*, individual codes for most of the variables were developed in an iterative process. That is, individual codes were first created and assigned to abstracts as string variables. Once saturation of themes was reached (Morse 1995), the list of string variables was analyzed, condensed, and converted into a list of numerical codes representing distinct entities or themes. The final abstract codebook contained three types of variables (Appendix 2): bibliographic characteristics; search combination results; and abstract content variables.

Bibliographic characteristics were recorded using six variables: body of literature (i.e., Health Promotion, Healthy Cities, Population Health, Urban Health) from which the abstract was retrieved; journal name; year of publication;

geographical region of focus (or origin); type of study described in the abstract; and population being investigated by the study (or target audience if not an empirical article). The search theme combination results were captured by the six possible combinations of the four distinct themes of 'inequity', 'intervention', 'level', and 'location'.

Five variables were employed to document the contents of the abstracts. Two article themes (primary and secondary theme) were documented for each abstract, to ensure the breadth of the abstract was sufficiently captured. The list of codes for these variables was developed inductively as the abstracts were analyzed. New codes were developed liberally (immersion), to ensure that any unique article theme would be captured. Once no new themes were being presented and no new codes created (crystallization), the list of codes was synthesized and pared down to a list of twenty codes. Using Health Canada's list of twelve determinants of health as the framework for identifying determinants in the abstracts (Health Canada 2001), abstracts were coded for mentioning up to three determinants of health. Four discourse codes were created, *a priori*, as ways of describing differences in health outcomes across populations: inequities, inequalities, disparities, and general discussions of differences in health outcomes or the social determinants of health.

Abstracts that implicated local communities in addressing health inequities and/or improving local health outcomes (e.g., if article discusses community capacity building, mobilization, empowerment, etc.) were coded 'yes' for implicating the community. Abstracts were coded 'yes' for the municipal role if

they *explicitly* implicated municipal governments in addressing health differences at the local level and/or in improving local health outcomes. The nature of the role municipalities could play was also examined. Abstracts were coded for the specificity of the role explicated (specific versus broad), and for the type of role that was described. Codes for type of municipal government role were developed inductively, synthesized, and pared down to a list of seven codes.

2-2.4 Rigor

A number of steps were taken to ensure rigor in this phase of the research. A universal search strategy (i.e., search terms, timeframe, and limits) across literature bodies and databases was employed. This strategy ensured all abstracts had equal chances of being generated, thereby reducing bias in the data collection process. Many codebook variables were developed *a priori*, which ensured the same data was recorded across all abstracts. This initial codebook was also subjected to peer review by MH (senior supervisor) to ensure that key concepts were captured.

Inductive codes were also rigorously developed. A liberal approach to developing codes was adopted (esp. for abstract content code) to ensure *all* new ideas were captured and recorded. Once saturation had been reached, the list of inductively developed codes was pared down into mutually exclusive ideas or concepts; this also corrected for potentially mislabelled abstracts by collapsing more specific ideas into larger and more general ones. Finally, while codes were collapsed, code labels remained highly detailed to ensure information was not overlooked in the analysis.

2-2.5 Literature Review Data Analysis

A comprehensive analytical framework was developed to facilitate the analysis of the abstract dataset (Appendix 3). The goals of the literature review analysis were to document the following: quantity of literature; bibliographic characteristics of the literature; general content of the abstracts; changes in literature over time; and how municipal governments had been implicated in addressing local health issues. Quantitative analyses of the abstracts involved collecting basic frequency data and cross-tabulations between variables, as well as Chi-Squared test with a 95% level of confidence to test for significant differences. Passages from exemplary abstracts were included to illustrate the nature of the implications made for municipal governments.

2-3 SURVEY METHODOLOGY

The overall objective of the survey was to conduct an opinion census of politicians and senior-level staff of municipalities in the Metro Vancouver region concerning local health issues in their jurisdictions, and their perspectives on the roles and responsibilities of municipalities in addressing these issues. The design and implementation of the survey closely followed Dillman's (2000) *Tailored Design Method*. This approach aims to increase the validity of survey findings by minimizing four types of error (Dillman 2000: 11):

1) Sampling error: the result of surveying only some, and not all, elements of the survey population;
2) Coverage error: the result of not allowing all members of the survey population to have an equal or known nonzero chance of being sampled for participation in the survey;
3) Measurement error: the result of poor question wording or questions being presented in such a way that inaccurate or uninterpretable answers are obtained; and
4) Nonresponse error: the result of people who respond to a survey being different from sampled individuals who did not respond, in a way relevant to the study.

Thus, sampling and coverage error are minimized through rigorous sampling procedures, measurement error is minimized through rigorous survey development, and non-response error is minimized through rigorous survey administration procedures.

2-3.1 Sampling

Metro Vancouver is the metropolitan area of Greater Vancouver that consists of 22 independently governed municipalities and one electoral district (Metro Vancouver 2008). Metro Vancouver is a unique governing system in

Canada that has not undergone processes of amalgamation, annexation, or any other similar governmental merger that has taken place elsewhere (Sancton 2005). Metro Vancouver bears the regional responsibilities of providing potable drinking water and disposal sites for garbage, recycling, treating sewage, and managing urban growth that spans municipal boundaries (Metro Vancouver 2008), while member municipalities are responsible for governing activities that fall directly within their jurisdiction. Thus, Metro Vancouver offered a unique opportunity to compare municipal policy and planning activities across a large number of jurisdictions that are exposed to similar social, political, economic, and geographical contexts.

Sample Frames

A sample frame refers to the entire population of individuals that possess characteristics that are of interest for study (Streiner and Norman 1998). Two sample frames were applied to the survey; one at the level of municipalities, and the other at the level of individuals working within municipalities. The municipal sample frame was Metro Vancouver (formerly the Greater Vancouver Regional District), consisting of 21 member municipalities[18] and one electoral area (Metro Vancouver 2008). A map of the Metro Vancouver area is shown in Figure 2-4**.** The sample frame for individuals was the population of politicians and employees working for any of the Metro Vancouver member municipalities (Figure 2-5).

[18] The City of Abbotsford was not included in the original municipal-level sample frame because it was not incorporated into Metro Vancouver until 2008.

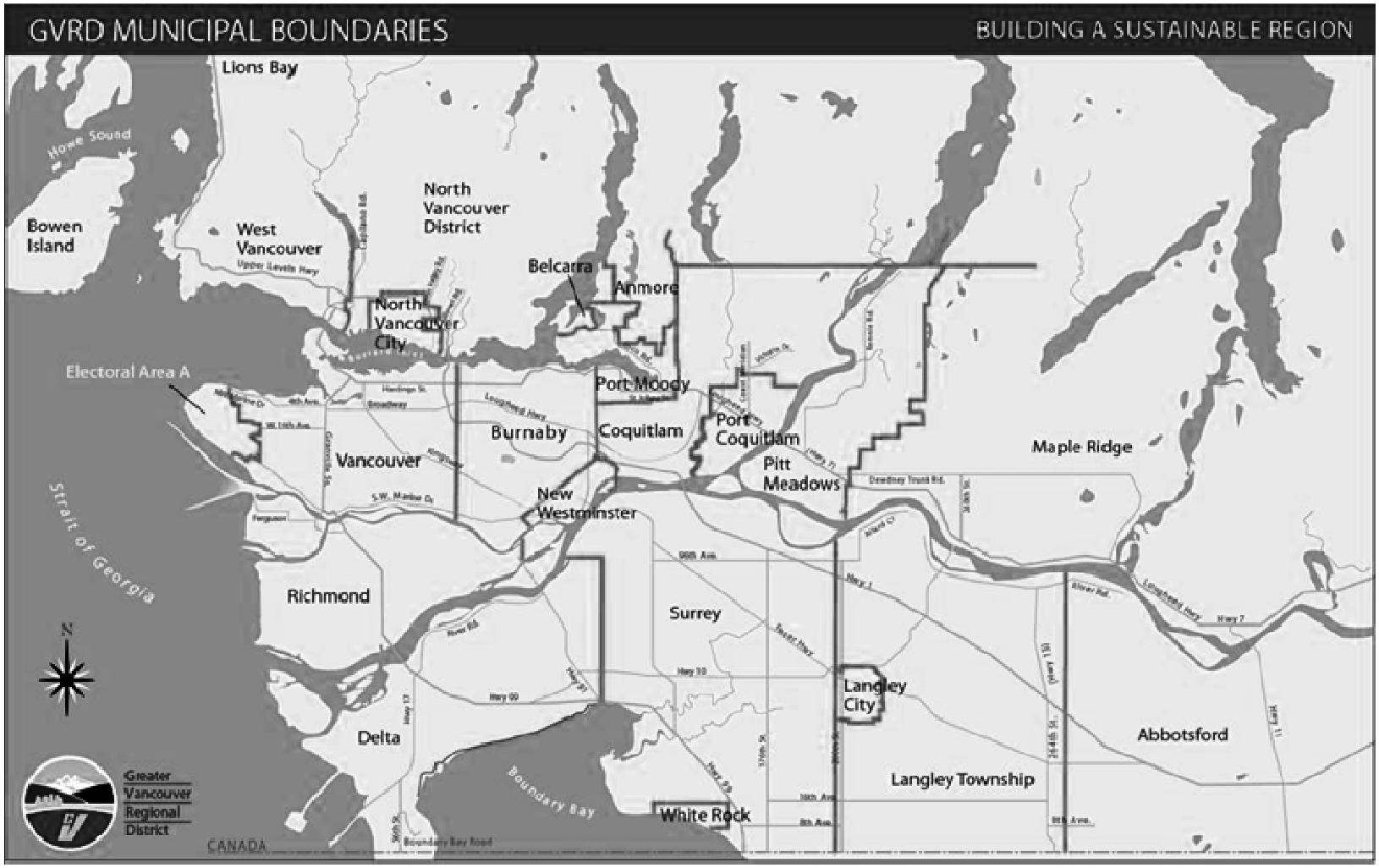


Figure 2-4: Map of Greater Vancouver Regional District Member Municipalities and Electoral Areas (Metro Vancouver 2008)

Inclusion and Exclusion Criteria for Municipalities

To be included in the municipal-level sample, municipalities had to be at least a census agglomeration (population of 10,000 or greater) and have its own governing system. Municipalities with populations of less than 10,000 were excluded because they were deemed unlikely to confront significant health inequities to warrant policy attention. Thus, excluded municipalities on the basis of these criteria were the Villages of Anmore, Belcarra and Lions Bay, the Municipality of Bowen Island, and the Greater Vancouver Electoral District A. Table 2-1 provides a summary of key characteristics of the 17 included municipalities.

Table 2-1: Population, Density, Park Land, Tax Rates and Average Household Incomes of Included Municipalities

Municipality	Population[1]	Density[1] (people/km^2)	Density Level	Share of Park Land by Municipal Total[2] (%)	Residential Tax Rate[3] (%)	Average Annual Household Income[4] ($)
Burnaby	202799	2275.6	High (over 2000)	22.5	2.4703	55589
City of Langley	23606	2309.1	High (over 2000)	14.1	3.7340	51030
City of North Vancouver	45165	3812.2	High (over 2000)	13.5	2.4344	54193
Coquitlam	114565	941.5	Low (Under 1000)	37.1	2.8558	64607
Delta	96723	526.5	Low (Under 1000)	8.0	3.1770	74936
District of North Vancouver	82562	513.9	Low (Under 1000)	33.8	2.5499	86705
Maple Ridge	68949	259.4	Low (Under 1000)	21.1	3.6338	61231
New Westminster	58549	3799.7	High (over 2000)	8.1	3.7295	50881
Port Coquitlam	52687	1826.4	Medium (1000 to 2000)	23.6	3.4143	65153
Pitt Meadows	15623	183.0	Low (Under 1000)	23.3	3.3515	62939
Port Moody	27512	1073.7	Medium (1000 to 2000)	33.7	3.0943	73602
Richmond	174461	1354.9	Medium (1000 to 2000)	11.4	2.4235	60724
Surrey	394976	1245.3	Medium (1000 to 2000)	8.5	2.2669	63197
Township of Langley	93726	305.4	Low (Under 1000)	5.4	2.9138	70481
Vancouver	578041	5039.0	High (over 2000)	14.5	2.4205	57916
White Rock	18755	3633.1	High (over 2000)	4.3	3.5160	62219
West Vancouver	42131	483.5	Low (Under 1000)	26.0	2.2536	120060

[1]http://www.gvrd.bc.ca/growth/keyfacts/census2006popdwell.htm, (Statistics Canada 2006),
[2]http://www.gvrd.bc.ca/growth/keyfacts/landusebymuni.htm, (GVRD 2001a) [3]http://www.gvrd.bc.ca/growth/keyfacts/munitax.htm (Metro Vancouver 2007), [4]http://www.gvrd.bc.ca/growth/keyfacts/avehhdinc.htm (GVRD 2001b)

Inclusion and Exclusion Criteria for Survey Participants

The goal of the survey was to census all individuals in the positions and municipalities of interest. To facilitate recruitment for the census, the organizational structures, charts, and annual reports of each included Metro Vancouver municipality were perused. Although department names and position titles varied by municipality, a generic schematic depiction was created to capture the scope of actors to be targeted for recruitment (Figure 2-5). Those deemed eligible for participation were mayors and city councillors, departmental heads (i.e., directors, general managers, and chiefs), deputy/assistant directors, departmental managers, and program managers of every department of every eligible Metro Vancouver municipality. Library chiefs/directors/managers, RCMP Officers-in-Charge, police chiefs, deputy police chiefs/administrative managers, fire chiefs, and deputy fire chiefs were also included in the census. Non-senior/managerial staff members from every department were excluded, except when they were the only representative for a given department (e.g., program coordinators, planners, supervisors, officers, inspectors, departmental engineers, aces, etc.).

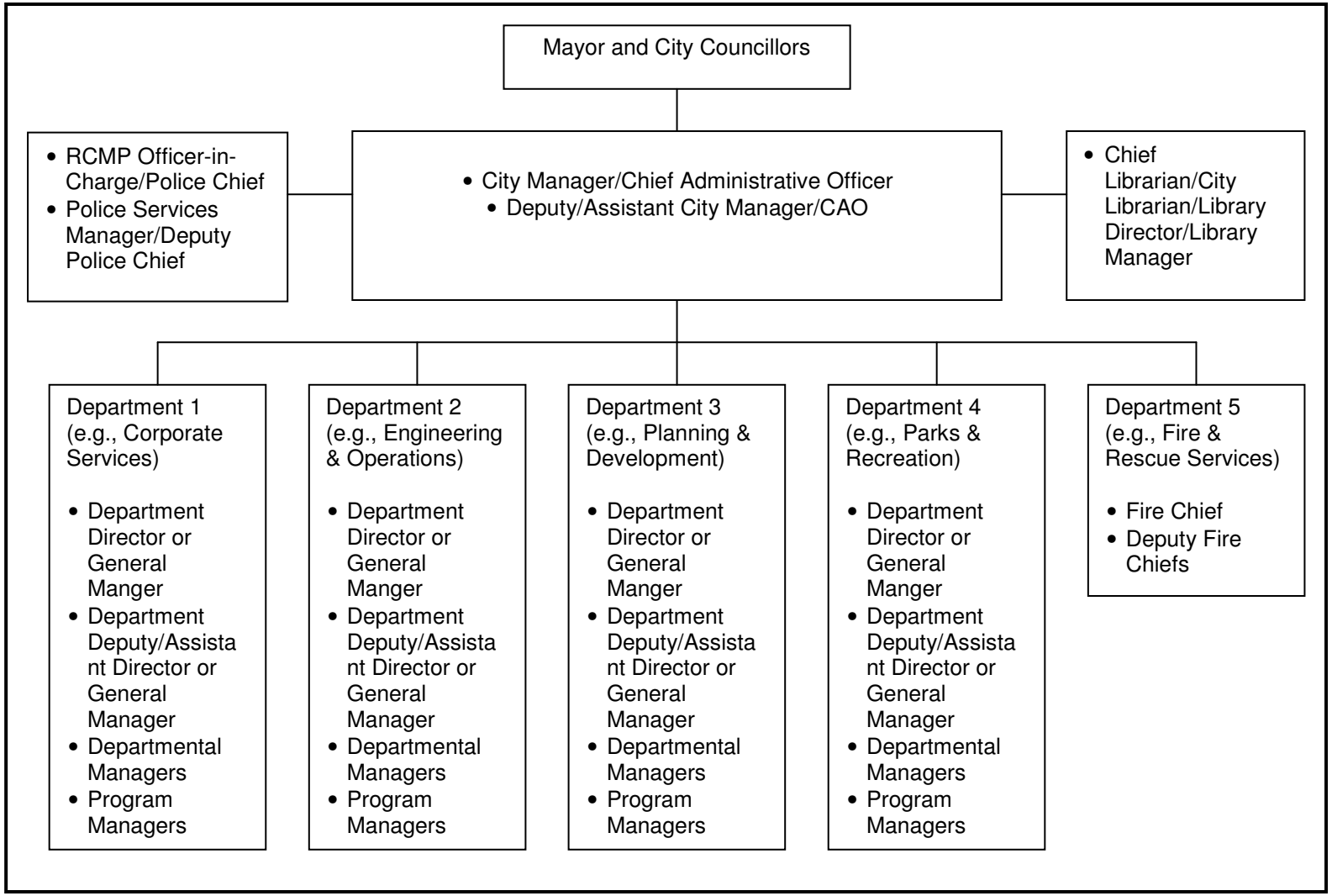


Figure 2-5: Schematic Diagram of Sample Frame for Eligible Census Participants

2-3.2 Development of Census Participant List

Using the above schematic to guide the process, eligible census participants were drawn from the municipal- and individual-level sample frames. The websites for each of the 17 included member municipalities were scanned to understand how each municipality was structured in terms of departmental names and positions. Once positions of interest were identified, detailed contact information for every eligible participant was gathered from the municipal government websites and inputted into a Microsoft Access® database. The central information desks for every municipality were then contacted with a request to review the contact list to ensure its accuracy and completeness. Responses to these requests were received by eleven of the seventeen municipalities, and the Access® database was updated accordingly. The final census contact list was N=652.

2-3.3 Ensuring Adequate Sample Size

Although a census was being conducted, it was important to determine the minimum number of completed surveys required to facilitate comparisons between municipalities, departments, and occupations. Two approaches were employed to determine this minimum number: one that considers measurement error (Thabane 2003), and another that considers sampling error (Salant and Dillman 1994).

Minimum Sample Size Calculation Based on Measurement Error

The measurement error approach calculates the minimum sample size based on an acceptable margin of error for scales employed in the survey instrument (Thabane 2003). In the survey used for this study, five-point scales were employed exclusively, and the acceptable margin of error was set, *a priori*, at 0.20. Based on a margin of error of 0.20, a 95% level of confidence, and a standard error of 1, the minimum sample size to facilitate statistical comparisons was N=97.

N = sample size
s = standard error = scale range/4
m.e. = margin of error
z = 1.96 (based on 95% level of confidence)

$N = (1.96(s)/m.e.)^2$

Thus, for a 5-point scale:

s = range/4 = 4/4 = 1
m.e. = 0.20

$N = [(1.96)(1)/0.20]^2$
$= 96.04$ ➔97 participants

Minimum Sample Size Calculation Based on Sampling Error

Salant (1994) provides a different approach to calculating minimum sample size based on the following considerations: a level of sampling error that is tolerable; the size of original population; the level of variation within that population; and the size of the smallest subgroup. Sampling error relates to precision of statistical estimates, inasmuch as sampling error is reduced as precision is increased. Increased precision, however, requires larger sample

sizes. As a census, the entire original population is being solicited to participate; thus, the original population size is N=652. The level of variation, and by extension, the size of the smallest subgroup is unknown, *a priori*. In these situations, Salant (1994) recommends to assume a '50/50 split' in the characteristic(s) of interest. Thus, based on an original population of N=652, an assumed '50/50 split', and a 95% level of confidence in statistical estimates, a sample size of N≈400 was required for sampling errors of ±3%, while a sample size of N≈240 was required for sampling errors of ±5% (Salant and Dillman 1994).

Estimated Response Rates

Response rates for mail administered surveys are often difficult to estimate because they can differ substantially between studies, from less than 30% to over 70% (Chai, Robertson et al. 2001; Lees, Scott et al. 2002; Kaplowitz, Hadlock et al. 2004). In the past, telephone survey response rates were reliably higher (typically over 60%) than those generated from mail-administered surveys (Bowling 1996; Jorm, Korten et al. 1997; Anderson 2003; Massett, Greenup et al. 2003), although recent research suggests this trend is changing with increased use of cellular phones, call-screening technologies, and 'do-not-call' registries (Dillman, Phelps et al. 2009; Mokdad 2009). Previous experience with a similar survey instrument administered by mail generated a 55% response rate, suggesting this is a reasonable response rate estimate for this study (Collins 2004). Thus, it was expected that approximately 360 completed surveys would to be returned. Such a response rate would easily

overcome concerns of measurement error, but precision (i.e., sampling error of ±3%) would be compromised.

Survey Costing Exercise Based on Final Census Contact List

To ensure adequate resources were available for administration of the survey, a costing exercise was also performed (Table 2-2). While the quantities for the first two mailings were certain, quantities for the third and fourth mailings were estimated based on response rates obtained during the administration of another similar survey (Collins 2004). The estimated total of nearly $3500 was within the limits of available resources.

Table 2-2: Costing Exercise for Census based on N=652 Eligible Participants

Item	Quantity (N)	Unit Price ($)	Total Price ($)
Mailing #1: Prenotice letter			
Printing of letters	652	0.08	53
Envelopes (#10 whites)	652	0.06	40
Postage	652	0.52	340
Mailing #2: Survey package			
Printing of letters	652	0.08	53
Printing of surveys	652	0.85	555
9”x12” envelopes	652	0.09	59
5.5”x8.5” return envelopes	652	0.09	59
Survey package postage	652	1.15	750
Return envelope postage	652	0.52	340
Mailing #3: Reminder letter			
Printing of letters	≈525	0.08	42
Envelopes (#10 whites)	≈525	0.06	32
Postage	≈525	0.52	273
Mailing #4: Second survey package			
Printing of letters	≈300	0.08	24
Printing of surveys	≈300	0.85	255
9”x12” envelopes	≈300	0.09	27
5.5”x8.5” return envelopes	≈300	0.09	63
Survey package postage	≈300	1.15	345
Return envelope postage	≈300	0.52	156
Grand Total			$3466

2-3.4 Survey Development

Referred to as the 'funnel method' (Moser and Kalton 2004), the survey was designed to ask broad questions early on, with progressively more specific and probing questions throughout. Because municipal governments are not directly responsible for delivery of healthcare services, they are not natural policy advocates for health issues. Thus, to convey the relevance and importance of potential participants' opinions, a one-page background piece was included at the beginning of the survey to increase participants' understanding of the SDOH and health disparities.[19] The final survey instrument is in Appendix 4.

Overall Survey Format

The survey was organized into four sections. The first section aimed to assess participants' general understanding of the SDOH. Participants were asked to: identify the healthiest and least healthy neighbourhoods in their jurisdictions; indicate how influential they viewed each SDOH to be to the health of local residents; indicate the level of priority for action they felt should be assigned to addressing each SDOH; and identify which determinants they thought municipalities are best and worst positioned to address. The second section was designed to gather participants' views concerning the roles municipalities, in general, should play to reduce health disparities. Participants were asked about the level of municipal influence and responsibility for

[19] The discourse of *health disparities* was employed in the survey, as it is the most apolitical manner in which to describe differences in health outcomes, and thus was considered to be the discourse that would be least likely to influence participants' survey responses. Thus, the phrase '*health disparities'* is used when referring to survey findings and '*health inequities'* is used in all other contexts.

addressing health disparities relative to other sectors; potential policy levers that municipalities can employ to reduce local health disparities; and constraints that municipalities face in reducing these disparities. The third section of the survey aimed to gather specific information from participants about what their municipality is actively doing to reduce local health disparities, by asking them to identify existing policies and plans. Section four gathered the participants' occupational and demographic information.

Developing Survey Questions

Streiner and Norman (1995) recommend reviewing the literature for existing, validated survey questions that could be used instead of developing new, un-validated survey questions. Of the 24 survey questions in total, seven questions were adapted from existing survey instruments. Questions 2, 3, 21, 22, 23, and 24 were all adapted from (Collins 2004) (originally adapted from (Brimacombe, Chaulk et al. 1998), and question 20 was adapted from the Canadian Community Health Survey (CCHS 2000).

The remaining seventeen questions were constructed based on Dillman's (2000) recommendations for minimizing participant burden and ensuring survey response quality. The combination of existing and newly developed questions encompassed an array of question structures: simplistic, open-ended questions requiring one word or sentence responses; partially-close-ended questions; close-ended with ordered choices; and close-ended questions with unordered response choices (Salant and Dillman 1994). Closed-ended questions assessed

either categorical judgements using yes/no response options, or continuous judgements using unipolar, 5-point adjectival scales (Streiner and Norman 1995).

Pilot Study

Before administering the survey to the field, a pilot study was conducted to gather feedback on the survey instrument to improve its validity and to enhance the overall rigor of the survey phase of the study.

The pilot study involved the mail administration of a cover letter, draft survey, and one-page feedback questionnaire (Appendix 5) to individuals at the City of Victoria. Respondents were requested to complete the survey as well as the feedback questionnaire, and return it using a self-addressed stamped envelope provided in the package. The one-page questionnaire assessed the length of time it took to complete the survey; the utility of the survey backgrounder; question clarity, ease, and comprehensiveness; and the value in participating.

The City of Victoria was chosen for the pilot study. While not a member, Victoria has many similarities to Metro Vancouver municipalities because of its geographic location, population size, and provincial political context. The census of potential survey respondents (i.e., municipal politicians and senior-level employees) at the City of Victoria was N=46. Ensuring every occupational level and department was represented, 24 individuals were contacted to participate and provide feedback on the survey instrument.

Ten completed surveys and eight feedback questionnaires were returned for the pilot study. The results from the feedback questionnaires were positive.

The average length of time it took for participants to complete the survey was 23 minutes. Six of eight participants indicated the survey backgrounder provided clarification and did not direct their responses. Participants generally felt the questions were asked in a clear manner, that they were relatively easy to respond to, and that, to their knowledge, no issues had been overlooked. A few participants indicated that more specificity in question wording would be helpful, and seven participants found completing the survey to be a rewarding experience.

A few revisions were made to the survey instrument based on responses generated from the ten pilot participants' surveys. For questions 4, 5, and 6, the word "one" was underlined to stress the importance of identifying only one SDOH, and extra lines were added to the subsequent 'why' questions to ensure participants could provide adequate detail. Questions 10 and 12 were revised so as to allow participants to simply list other policy levers or constraints that they felt were relevant. Finally, feedback received throughout the pilot study illuminated the importance of communicating to future survey participants, especially new and less experienced employees, the value and necessity of their input. A number of potential participants in this pilot study felt their participation was not relevant to the study because they did not work in the area of health. Participation from these individuals only occurred after follow-up correspondence to highlight the relevance of their perspectives and experiences, and emphasize the utility of their input.

2-3.5 Survey Implementation

Implementation of the survey closely followed Dillman's (2000) *Tailored Design Method*, which recommends a five-contact approach to survey administration. The rationale for this approach is to signal to potential participants the importance of their participation in the survey, to regularly remind potential participants of the study, and ultimately, to ensure the highest possible response rates are achieved.

The process of administration of the survey is summarized in Table 2-3. As recommended (Dillman 2000), five contacts were employed to induce eligible contacts to participate. The prenotice letter was administered a few days before the original survey package to bring potential participants' attention to the survey, and to prepare them for receipt of the survey package. The survey package contained a detailed covering letter, the survey instrument with a unique identifier code for tracking purposes, and a self-addressed stamped envelope for easy return. Two weeks after administration of the survey package, a reminder postcard was sent out to non-respondents. This contact assumed potential participants remained interested in completing the survey, and simply communicated the urgency for a response. The following week, non-respondents received another survey package, based on the rationale of replacing the original survey that was likely misplaced or thrown out. The fifth and final contact was by email, and it provided a firm deadline for surveys to be returned.

Throughout the survey administration process, participants were encouraged to come forward with questions or concerns, and any messages that were received during this process were responded to immediately. Individuals indicating they were not comfortable with participating were provided with clarification regarding the value of their input, and strongly encouraged to respond up until the fifth contact, when individuals were simply thanked and not pursued further.

Table 2-3: Survey Administration Process (Salant and Dillman 1994)

Nature of Contact	Number of Individuals Contacted	Date Contact Sent	Appendix #
1 – Prenotice Letter	652	Tuesday, January 22nd, 2008	Appendix 6
2 – Survey Package #1	652	Friday, January 25th, 2008	Appendix 7
3 – Reminder Postcard	510	Thursday, February 7th, 2008	Appendix 8
4 – Survey Package #2	455	Friday, February 15th, 2008	Appendix 9
5 – Email Follow-up	336	Wednesday, February 27th, 2008	Appendix 10

2-3.6 Ensuring Rigour by Reducing Error

As outlined in Section 2-3, there are four sources of error in survey research: sampling error, coverage error, measurement error, and non-response error (Dillman 2000). Considerable steps were taken to reduce these errors in the survey methodology, and ensure the overall rigor of the survey component of the study.

Reducing Sampling and Coverage Error

Sampling error occurs when only some of the elements of the survey population are sampled, while coverage error occurs when the sampled populations do not have equal chances of being sampled (Dillman 2000) 11). Because the survey aimed for a census, every effort was made to sample *all* elements of the survey population. Theoretically, sampling error was nil because everyone was solicited for participation, and coverage error was nil because everyone had a 100% chance of being solicited.

The reality, however, was that not all information collected from municipal government websites was up-to-date and accurate. Thus, while the risk of sampling and coverage errors remained low, the list of census contacts did possess minor inaccuracies. Steps to reduce those inaccuracies were made by contacting information departments in each municipal government for their review of the information collected (see section 2-3.2).

Reducing Measurement Error I: Validity

Measurement error occurs when surveys generate responses that are inaccurate or difficult to interpret due to poor design (Dillman 2000). Using Dillman's (2000) recommendations for high quality survey design, a number of steps were taken to ensure measurement error was minimized. In terms of question wording, considerable effort was made to use specific wording, avoid jargon, biased, double-barrelled and double-negative questions, and soften response options for personal questions. The overall questionnaire was designed to be as short as possible, ordered from general to specific with useful

transitions, and prominently displayed Simon Fraser University's logo to promote its legitimacy.

For the survey findings to be valuable, various steps must be taken to ensure the validity of the instrument; that is, to assess whether the survey instrument was measuring that which was intended. Four types of validity have been defined in the context of survey instruments (Streiner and Norman 1995). An instrument has *face validity* if it assesses the characteristics it is designed to assess, while an instrument has *content validity* when it assesses all relevant elements of the characteristic of interest (Streiner and Norman 1995). Committee review of the survey instrument and feedback from the pilot study indicated that the survey instrument had face and content validity. Because these assessments of validity rely heavily on 'expert opinions', they are considered weak measurements of validity (Streiner and Norman 1998).

Construct validity represents the third type of validity, and it is assessed by examining the degree of association between two or more measures based on an underlying theoretical construct (Streiner and Norman 1998). This type of validity is stronger than *face* and *content* validity, but is problematic because it relies on the accuracy of untested hypotheses. That is, if

> …the relation between these two measures…is in the expected direction, we have evidence that both the measure and the hypothetical construct are right. However, if there is no relationship between the two measures, we have no way of determining whether our measure or our theory is wrong. (Streiner and Norman 1998: 114)

Thus, construct validity was not assessed for this instrument.

The fourth and strongest measure of validity, *criterion validity*, refers to the ability of newly developed scales to generate results that are comparable to an existing 'gold standard' (Streiner and Norman 1995). When 'gold standards' exist (which is rare), survey researchers typically employ these well established and validated scales in their own survey instruments (as opposed to reinventing the wheel by developing a new scale, and then testing its criterion validity). When 'gold standards' do not exist, Streiner and Norman (1995) recommend that measures of association be made between newly developed scales and existing scales that are hypothesized to be correlated. Because the same characteristic was never measured more than once in this survey, criterion validity could not be assessed.

Reducing Measurement Error II: Reliability

Reliability refers to the ability to generate the same results from the same instrument in different contexts (Streiner and Norman 1998). Survey instrument reliability was assessed by measuring *internal consistency* and *test-retest reliability* (Streiner and Norman 1995).

When different questions are designed to 'tap into' the same general characteristic, the resulting correlation between those questions is *internal consistency*. This is often the case for multi-item questions that tap different elements of the same general concept. This survey contained six multi-item questions, and internal consistency was measured for each using the Cronbach's alpha correlation statistic (Norusis 2007). The internal consistency ranged from 0.622 to 0.885 (Table 2-4).

The second assessment of survey reliability was a test-retest exercise. The objective of this exercise was to assess the overall stability of the instrument and constructs being measured over time, as well as the reproducibility of the results. Proportionate sampling was used to develop the reliability test sample. One quarter of the participating sample (N=345) was desired, and that proportion was applied to each of the municipalities and each of the major departments. The reliability survey package was administered on May 1st, 2008, and participants were allowed one month to complete and return their survey. A total of N=83 individuals were requested to complete the test-retest reliability survey, and N=26 reliability surveys were completed and returned. The results of the test-retest exercise, generated using *Generalizability theory*, are displayed in Table 2-4.

Table 2-4: Reliability Statistics for Survey Instrument

Survey Question	Internal Consistency N=345	Test-Retest Reliability N=26
2	0.703	0.868
3	0.669	0.799
7	0.622	0.934
8	0.704	0.846
9	0.885	0.704
11	0.806	0.930
All multi-item questions	N/A	0.840

Reducing Coverage and Non-Response Error

Non-response error occurs when respondents differ from non-respondents in a systematic way (Dillman 2000). Steps taken to minimize non-response error

included sustained follow-up procedures using the five-contact approach to survey administration, and by offering encouraging words to any non-respondents who expressed hesitation in completing the survey. Because a 100% response rate was not achieved, non-response error could not be entirely eliminated. Thus, it was important to understand how non-respondents differed from respondents. The completeness of the census contact lists facilitated comparisons of between respondents and non-respondents (i.e., response rates) by municipality, departments, and elected versus non-elected officials.

2-3.7 Data Management and Statistical Analyses

Data generated from completed surveys were entered into an SPSS® database (version 15.0). In addition to data from the survey questions, the original contacts' position and department were inputted to facilitate future analyses that would help to assess whether the survey respondent was the original contact person, or whether the contact simply delegated the task of completing the survey to another municipal employee. Other municipal-level variables that were inputted were those summarized in Table 2-1 – population size, population density, percentage share of park land, residential tax rates, and average annual household income.

Analytic Framework for Survey Analysis

To facilitate the analysis of the survey data, another analytical framework was developed (Appendix 11). This framework was developed based on four objectives for the survey analysis:

1) To assess participants' understanding of and attitudes towards the SDOH;
2) To assess the capacity of municipalities, in general, to address local health disparities;
3) To elicit information on the extent and nature of participating municipalities' efforts to address local health disparities; and
4) To assess the relationship between municipal attitudes and capacities for action on health disparities.

To address these objectives, the analytic framework was divided into five sections. The first section was designed to summarize general characteristics of the survey participants, and data analysis was strictly descriptive in scope. The remaining four sections dealt with the four analytic goals using more complex statistical analyses. As much of the data were nominal and ordinal, and did not follow a normal distribution, non-parametric tests were predominantly used (Norusis 2007).

Statistical Tests Employed in the Survey Analysis

Tests for significant differences between two groups employed the Mann-Whitney test, and the Kruskal-Wallis test for multiple groups.[20] As a paired t-test equivalent, the Wilcoxon Signed Ranks test was employed to assess congruence between responses. Tests for associations between variables employed bivariate analyses and the Spearman test statistic – a non-parametric equivalent to the Pearson correlation coefficient. Because multiple simultaneous comparisons were being made, a 99% confidence level was employed for all tests of significant differences and association.

[20] As no systematic differences were observed between groups for any of these tests, summary tables are provided in appendix 12.

One component to addressing the fourth goal of the analysis was a bivariate logistic regression analysis, to determine whether the likelihood of respondents perceiving their municipality to place high priority on addressing health disparities was predicted by various individual- and municipal-level variables. Before running the regression models, principal components factor analysis was employed to identify those items in multi-item survey questions that generated the greatest variation in responses. Survey items accounting for the greatest variance were included in the regression models. Full and reduced backward-step regression models were run. Hosmer and Lemeshow goodness-of-fit tests were conducted, judging good fits for models with $p<0.05$. A 95% confidence level was employed for the regression models.

2-4 DOCUMENT ANALYSIS METHODOLOGY

The third phase of research employed qualitative content analysis to investigate policy documents from selected Metro Vancouver municipalities for indications of intent to address health inequities at the local level.[21] Qualitative content analysis refers to the process of systematically reviewing, identifying, categorizing, and extracting information from documents that relates to the study question or purpose (Frankfort-Nachmias and Nachmias 2000; Patton 2002). Similar analyses of policy documents for evidence of knowledge translation on health inequalities research have been conducted at the local level in Europe and New Zealand (Fulop and Elston 2000; Andersson, Bjaras et al. 2003; Bullen and Lyne 2006), and at the provincial level in Canada (Davidson 1999; Iannantuono and Eyles 1999). Yet, the policy activities of Canadian municipalities have evaded investigation.

Much like in the first phase of the research, the document analysis phase employed a baseline codebook as an organizing framework for the initial data analysis (section 2-4.2), followed by immersion and crystallization with the data to develop a more comprehensive codebook for the remaining data analysis (section 2-4.3) (Addison 1999; Miller and Crabtree 1999). Employing this

[21] It is worth reiterating that this phase of the research program investigated the 'intentions' of municipal governments in addressing health inequities, not the 'realities' of their activities. The complexity of investigating these 'realities' was far beyond the scope of this research program, requiring considerably more data collection and analysis to confirm or disconfirm the existence of municipal activities on health inequities, let alone whether these activities were the products of policy statements or other influential factors. The overarching objective of the research program – to assess the extent to which the health inequities knowledge base has permeated municipal policy – was adequately and appropriately addressed by investigating the presence of these ideas in their community planning visions.

analytical style facilitated systematic exploration in the Official Community Plans (OCPs) of key themes identified in the previous two phases of research, while allowing for flexibility in identifying OCP-specific themes not captured by the codebook.

2-4.1 Document Analysis Parameters

Selection of Municipalities

Municipalities that assign high priority to reducing health inequities were assumed to be more likely to incorporate the evidence base in their official policies.[22] Thus, the mean level of priority for reducing health disparities (phase two, survey question 13) by municipality was used as the basis for identifying eligible municipalities for qualitative content analysis of policy documents (Table 2-5). The 5-point scale ranged from *high priority* (1) to *not a priority at all* (5), and the overall mean was 2.67. Municipalities with a mean priority of less than 2.50

[22] Comparisons between 'high priority' and 'low priority' municipalities may have yielded some interesting findings. For instance, key priorities pertaining to the built environment may have differed between these types of municipalities, and shed light on why 'low priority' municipalities are less concerned about local health issues. This approach could have also revealed a large gap in understanding between municipal governments of the complexity of the health determinants and perceptions of municipal responsibilities. Alternatively, analyses of 'low priority' municipalities could have also revealed a disconnect between survey respondents perceptions about their governments' priorities, and the actual priorities and concerns as articulated in municipal government vision statements. That is, municipalities characterized by survey respondents as 'low priority' may have placed considerable attention on these issues in their vision statements published nearly a decade prior. Despite these potential revelations, comparisons were made only between 'high priority' municipalities for a few reasons. First, the objective of this phase was not simply to identify whether municipalities discussed local health issues in their visions statements, but also to scrutinize the contents of those discussions. Given that 'low priority' municipalities likely would not have discussed local health issues, the more in-depth analyses of the contents of these discussions would not have been possible. The 'high priority' municipalities that were chosen for the analysis were arguably the five most urban of all Metro Vancouver member municipalities and thus, likely exhibit the greatest socioeconomic inequities within their jurisdictions. Municipalities that confront such inequities may be more likely to engage with the health inequities knowledge base, and assessing the extent of this engagement was the intention of this research phase.

were eligible for inclusion, thereby selecting municipalities that place relatively high levels of priority for reducing health disparities. Eligible municipalities were Burnaby, New Westminster, Richmond, Surrey, and Vancouver.

Table 2-5: Mean Level of Priority for Reducing Health Disparities

Municipality	Mean	Number of Respondents	Standard Deviation
Burnaby	2.35	20	0.671
City of Langley	2.88	16	0.885
City of North Vancouver	2.77	22	0.612
Coquitlam	2.79	19	0.855
Delta	2.80	15	1.082
District of North Vancouver	2.70	23	0.822
Maple Ridge	2.62	26	0.752
New Westminster	2.20	10	0.422
Port Coquitlam	3.33	15	0.900
Pitt Meadows	3.56	9	1.014
Port Moody	3.67	6	1.211
Richmond	2.48	44	0.698
Surrey	2.17	18	0.786
Township of Langley	3.18	17	0.883
Vancouver	2.30	46	0.726
White Rock	2.80	10	0.919
West Vancouver	2.88	17	0.993
Total	2.67	333	0.867

Selection of Documents

Municipality Official Community Plans (OCPs) were chosen for this phase of the research. According to the City of New Westminster, an OCP is:

> …a general statement of the broad objectives and policies of the local government which detail the form and character of existing and proposed land uses and servicing requirements in the area covered by the plan. The Municipal Act authorizes local

> governments to adopt an Official Community Plan. Once an Official Community Plan is adopted, all bylaws enacted and public works undertaken must be consistent with the goals, objectives and policies outlined in the plan. An Official Community Plan, however, does not commit or authorize a municipality to proceed with any project specified in the plan. (Westminster 1998: paragraph 15)

OCPs articulate broad, long-term visions for the municipality, delineate departmental roles and responsibilities for achieving these visions, and provide statements of intentions for implementing these visions by tackling local issues and concerns. As such, OCPs are appropriate documents for in-depth analyses of whether the health inequities knowledge base has permeated the planning visions and intentions at the level of municipal governments in Metro Vancouver.

Documents were retrieved from municipal government websites, converted to rich text format (RTF) files, and reviewed for relevant material.[23] OCP sections that focused on statements of vision and intention were included, while more technical sections referring to specific development permits, plans and guidelines were omitted. All tables, figures and maps were also omitted as they could not be converted into RTF. Table 2-6 summarizes the characteristics of the OCPs that were analyzed for this phase of the research.

[23] While OCPs were examined for four of the five municipalities, the only comparable document provided by the City of Vancouver website was CityPlan. Unlike the specificity provided in the OCPs regarding the respective roles of all municipal departments in implementing the municipality's community plan, CityPlan was more a conceptual in scope, focusing broadly on planning and development priorities over a 20-year timeframe in the City of Vancouver. Thus, many of the differences observed between Vancouver and the other four municipalities will likely be attributable to the differences in the documents that were reviewed.

Table 2-6: Summary of Characteristics of OCPs Analyzed

Municipality, Year	OCP Sections Analyzed	Word Count of Included Sections	# of Pages Included in Analysis	Sections Excluded from Analysis
Burnaby, 1998	1.0 Introduction 2.0 Context 3.0 The Growth Strategy 4.0 Residential 5.0 Commercial 6.0 Industrial 7.0 Parks and Public Open Space 8.0 Transportation 9.0 Agriculture 10.0 Environment 11.0 Social Planning 12.0 Heritage 13.0 Community Services and Facilities Appendix 1: Regional Context Statement	37,873	72	All tables, figures, maps
New Westminster, 1998	Part One: Introduction Part Two: Planning Issues, Goals, Policies & Priorities 2.1 Population & Growth Management Community & Social Issues Housing Parks & Open Space Environment & the Riverfront Heritage & Neighbourhood Character Commercial Revitalization & the Economy Industrial Activity & the Economy Urban Design 2.10 Institutional Facilities & Community Services 2.11 Transportation 2.12 Sewer, Water & Waste Utilities 2.13 Implementation	34,188	59	All tables, figures, maps Part Three: Land Use Concept and Development Permit Areas Appendixes

Municipality, Year	OCP Sections Analyzed	Word Count of Included Sections	# of Pages Included in Analysis	Sections Excluded from Analysis
Richmond, 1999	Plan Interpretation 1.0 Plan Overview 2.0 Jobs & Business 3.0 Neighbourhoods & Housing 4.0 Transportation 5.0 Natural & Human Environment 6.0 Community Facilities & Services 7.0 City Infrastructure 8.0 Governance & Implementation	28,538	57	All tables, figures, maps 9.0 Development Permit Guidelines Appendix
Surrey, 1996	1. Overview 2. Issues and Policies A. Manage Growth for Compact Communities B. Build a Sustainable Local Economy C. Build Complete Communities D. Enhance Image and Character E. Increase Transportation Choice F. Protect Agriculture and Agricultural Areas G. Protect Natural Areas H. Provide Parks and Recreational Facilities I. Improve the Quality of Community J. Enhance Citizens' Safety and Well-being Through Crime Prevention Appendix B. Regional Context Statement	29,655	45	All tables, figures, maps 3. Land Use Strategy 4. Supplemental Land Use Strategy 5. Secondary Plans 6. Permits and Procedures 7. Administration and Procedures Schedules Appendix A Divisions B-F
Vancouver, 1995	Introduction City of Neighbourhoods Sense of Community Healthy Economy – Healthy Environment A Vibrant Central Area Accountability The City in the Region	12,007	24	N/A

2-4.2 Baseline Codebook Development

A baseline codebook was developed to facilitate the initial coding process of the OCPs. The components of this codebook were informed by the previous research phases, and framed around five questions. These questions were then redefined as nodes, and codes were developed within each node. Comprehensive code lists, with highly specific individual codes, were designed. The baseline codebook is summarized in Table 2-7.

Once a comprehensive set of codes for each node was established, document coding commenced with the City of Burnaby OCP. In the midst of coding this first OCP, it became apparent that a number of issues were being raised in the OCP that were clearly important to the municipality, but were not captured in the basic codebook. Thus, a sixth node was added to the codebook that captured OCP-derived themes, the codes for which were developed inductively (i.e., as themes emerged and recurred in sufficient quantity to warrant development of a new code).

Table 2-7: Baseline Codebook for Analyses of OCPs

Question	Node	Codes
Was health (or a related concept) discussed in the OCPs?	Discussion of health	• Health • Well-being • Disease, illness, disability, injury
How were differences in outcomes (health, disease, other) framed in the OCPs?	Framing of differences	• Equality/inequality • Equity/inequity • Outcomes/SDOH • Disparity • Gradients
Which of the SDOH are mentioned in the OCPs?	SDOH	• Income & Social Status • Social Support Networks • Education & Literacy • Employment & Working Conditions • Social Environment • Physical Environment • Personal Health Practices & Coping Skills • Early Childhood Development • Biology & Genetic Endowment • Health Services • Gender • Culture & Tradition
Which prescriptions for municipal activity were mentioned in the OCPs?	Municipal intervention categories	• Conduct assessments, gather data • Health strategies, programs, education • Inter-governmental initiatives, relations, roles • Intra-governmental capacity, leader, facilitator • Develop community partnerships, networks • Improve physical & social environments
Were any challenges to municipal intervention identified in the OCPs?	Challenges	• Challenge

2-4.3 Document Storage, Coding Methods and Codebook Refinement

Following retrieval from municipal websites and conversion of relevant sections into RTF files, the OCPs were imported into the qualitative data analysis program QSR NVivo® (version 2.0). As indicated above, the first document to be coded was the City of Burnaby OCP. This involved reading the entire document, and coding any and every applicable sentence along the way. To ensure the context was intact, entire sentences were coded at a minimum. Upon completion of coding for the first OCP, the City of New Westminster OCP was then read and coded, using the revised six-node codebook (including the newly added OCP-specific node).

After coding these two OCPs, reports were generated for each code to assess the effectiveness of the codebook in accurately capturing the themes of interest, and to establish searchable keywords for each code. Each coding report[24] was reviewed, and useful keywords were added to the codebook as they arose. This comprehensive code-specific keyword list was then used to validate, correct, and revise the coded passages on the first two OCPs. The keywords then facilitated a more efficient and reliable coding process for the remaining three OCPs.[25] The keyword search process also facilitated fleshing out of the codebook: parsing codes out into multiple, specific codes; and paring down of

[24] A coding report extracts from the originally coded document each instance that the theme of interest was coded in that document, thereby simplifying the textual analysis to relevant passages only. Coding reports can be generated for a single document, multiple documents, or all documents in a particular QSR NVivo® project. The coding reports generated for this analysis were for all five OCP documents.

[25] Locating particular keywords did not guarantee the passage would be coded as such. Passages were always scrutinized to ensure the coding was appropriate.

codes to reduce redundancy and overlap. The final OCP codebook, with codes in italicized font and keyword lists provided for each code, is located in Appendix 13.

2-4.4 Coding Analysis

The coding analysis strategy was shaped by the five major questions posed in Table 2-7. Specifically, the analysis was guided by the following series of questions:

1) How much were health and related concepts mentioned in the OCPs?
2) In what context were health and related concepts discussed in the OCPs?
3) How much were outcome-difference frames mentioned in the OCPs?
4) In what context were outcome-difference frames discussed in the OCPs?
5) How much were the SDOH mentioned in the OCPs?
6) What SDOH-specific themes were common across the OCPs, and what SDOH-specific themes were unique to particular OCPs?
7) How much were municipal interventions and challenges mentioned in the OCPs?
8) Which intervention-specific and challenge-specific themes were common across the OCPs, and what intervention-specific and challenge-specific themes were to unique to particular OCPs?

Questions 1, 3, 5, and 7 were addressed by generating a passage count by code and OCP. The remaining questions were addressed through the generation and in-depth analysis of coding reports. Each coding report was thoroughly reviewed and scrutinized, and recurrent themes were documented for each code within each OCP. For questions 2 and 4, the total number of passages under scrutiny in the coding reports was relatively low, and recurrent themes were easily generated and documented.

The process of addressing questions 6 and 8 was significantly more involved, as the total number of passages under scrutiny was considerably

higher. First, coding reports were scrutinized and recurrent themes documented for each code. The results of the thematic analyses for the SDOH, intervention, and challenge-specific codes are summarized in Appendix 14, Appendix 15, and Appendix 16, respectively. Then, the results of these thematic analyses were further analyzed to document themes that were common across OCPs, as well as themes that were unique to particular OCPs. Themes were considered common if they were mentioned in three or more OCPs, and unique themes were those that were mentioned in only one OCP. Common themes were identified and documented by code, while unique themes were identified and documented by OCP.

CHAPTER 3: LITERATURE REVIEW RESULTS

3-1 BASIC DESCRIPTIVE RESULTS

3-1.1 Quantity of Abstracts

Table 3-1 summarizes the quantity of abstracts and inclusion rates (IRs). Substantial differences in quantity of distinct[26] abstract hits were observed between the four literature bodies (Health Promotion had 972; Healthy Cities 51; Population Health 555; Urban Health 30), highlighting the differences in age, scope, and relative influences of these literatures on the health inequities knowledge base. A total of 1608 distinct abstract hits were generated across the four literature bodies, and 1004 abstracts were eligible for inclusion, for an overall IR of 62.4%. Across the four bodies of literature, inclusion rates ranged from 55.3% for Population Health to 74.5% for Healthy Cities, suggesting abstracts from the Healthy Cities literature bore the greatest relevance to the themes of interest in this study. Web of Science appears to have been the most comprehensive in scope (i.e., indexed the broadest disciplinary range of journals), as the greatest number of abstracts were generated from this database (N=849).

Using the inclusion rates generated for every search theme combination, average IRs were generated by body of literature, electronic database, and search theme combination (Table 3-2). By body of literature, the lowest average IR was generated from the Urban Health literature, mainly attributable to excluded abstracts that employed 'urban health regions' as samples or focused

[26] Searches were conducted by combining search themes, and then 'complete' files were generated by combining all of the abstract hits together. Searches by theme generated some duplicate abstracts; thus, 'complete' files did not contain duplicates, and are thus less than the sum of the results for the six search theme combinations.

on systems of ‘urban health insurance’. Abstracts generated from PubMed searches had the highest average IR, reflecting the review strategy that searched this database first. In terms of search themes, the Inequality-Location combination generated the lowest average IR (45.2%), and the Inequality-Intervention combination generated the highest average IR (57.2%). This latter finding suggests that the LOCATION search theme was the least valid theme for generating relevant abstract hits (e.g., many hits cited the Ottawa Charter for Health Promotion, but were not relevant to this study), while the INEQUALITY theme bore the greatest validity in the search process.

Table 3-1: Total Number of Hits (H), Included (I) Abstracts, and Inclusion Rates (IR) by Body of Literature and Electronic Database

	Search Theme Combo	Health Promotion		Healthy Cities		Population Health		Urban Health		Total		
		I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	IR (%)
PubMed	**Inequity-Intervention**	**191**	**201**	**10**	**11**	**105**	**108**	**7**	**8**	**314**	**329**	**95.4**
	Inequity-Level	**5**	**5**	**1**	**1**	**6**	**6**	**2**	**2**	**14**	**14**	**100.0**
	Inequity-Location	**38**	**40**	**1**	**1**	**71**	**83**	**0**	**0**	**110**	**124**	**88.7**
	Intervention-Level	**29**	**31**	**5**	**5**	**2**	**2**	**4**	**5**	**40**	**43**	**93.0**
	Intervention-Location	**158**	**186**	**6**	**6**	**56**	**82**	**2**	**3**	**222**	**277**	**80.1**
	Level-Location	**4**	**4**	**2**	**2**	**1**	**2**	**0**	**0**	**7**	**8**	**87.5**
	Total I/H[27]	**425**	**467**	**25**	**26**	**241**	**283**	**15**	**18**	**707**	**795**	**88.9**
	Total I/H, Distinct[28]	**383**	**423**	**20**	**21**	**192**	**228**	**11**	**14**	**607**	**687**	**88.4**
Sociological Abstracts	**Inequity-Intervention**	**4**	**9**	**1**	**1**	**6**	**16**	**0**	**2**	**11**	**28**	**39.3**
	Inequity-Level	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**5**	**0.0**
	Inequity-Location	**2**	**2**	**0**	**0**	**5**	**25**	**0**	**0**	**7**	**27**	**25.9**
	Intervention-Level	**2**	**3**	**0**	**0**	**1**	**3**	**0**	**1**	**3**	**7**	**42.9**
	Intervention-Location	**15**	**17**	**0**	**0**	**2**	**7**	**0**	**0**	**17**	**24**	**70.8**
	Level-Location	**2**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**3**	**4**	**75.0**
	Total I/H	**25**	**33**	**1**	**1**	**15**	**57**	**0**	**4**	**38**	**95**	**40.0**
	Total I/H, Distinct	**19**	**27**	**1**	**1**	**13**	**42**	**0**	**2**	**33**	**72**	**45.8**

[27] This value is equal to the sum of results for search combo themes 1 through 6.

[28] This value is based on the number of abstracts compiled in 'complete' files, where redundant abstracts would not have appeared.

	Search Theme Combo	Health Promotion		Healthy Cities		Population Health		Urban Health		Total		
		I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	I (N)	H (N)	IR (%)
Web of Science	**Inequity-Intervention**	**134**	**260**	**5**	**13**	**41**	**124**	**2**	**18**	**181**	**414**	**43.7**
	Inequity-Level	**2**	**6**	**1**	**2**	**3**	**7**	**3**	**4**	**9**	**19**	**47.4**
	Inequity-Location	**18**	**49**	**2**	**3**	**44**	**113**	**0**	**1**	**64**	**166**	**38.6**
	Intervention-Level	**28**	**60**	**8**	**11**	**3**	**5**	**5**	**8**	**44**	**84**	**52.4**
	Intervention-Location	**85**	**217**	**5**	**8**	**44**	**112**	**1**	**5**	**135**	**342**	**39.5**
	Level-Location	**6**	**8**	**4**	**5**	**2**	**4**	**0**	**0**	**12**	**17**	**70.6**
	Total I/H	**273**	**600**	**25**	**42**	**137**	**365**	**11**	**36**	**445**	**1042**	**42.7**
	Total I/H, Distinct	**239**	**522**	**17**	**29**	**102**	**285**	**7**	**14**	**364**	**849**	**42.9**
Total I/H, Distinct,	**Entire Sample**	**641**	**972**	**38**	**51**	**307**	**555**	**18**	**30**	**1004**	**1608**	**62.4**

I=Included Abstracts; H=Abstract Hits; IR=Abstract Inclusion Rate

Table 3-2: Average Inclusion Rates Based on Individual Search-Theme Inclusion Rates

Comparison Category	Variable	Average Inclusion Rate by Search Themes
Body of Literature	Health Promotion	69.5
	Healthy Cities	59.0
	Population Health	51.9
	Urban Health	27.9
Database	PubMed	83.1
	Sociological Abstracts	27.9
	Web of Science	45.2
Search Theme Combo	Inequality-Intervention	57.2
	Inequality-Level	50.1
	Inequality-Location	45.2
	Intervention-Level	59.6
	Intervention-Location	49.8
	Level-Location	50.4

3-1.2 Bibliographic Characteristics

Over 40% of the abstracts were produced in and/or profiled a Canadian region, reflecting the search themes that prioritized Canadian content (Table 3-3). Over one-fifth (20.1%) of the abstracts had an American focus, while very few (2%) featured Mexico, Central and/or South America. Canadian-focused abstracts were more prevalent among Health Promotion (35.4%) and Population Health (56.0%) abstracts, while European-focused abstracts were more prominent in the Healthy Cities (23.7%) and Urban Health (27.8%) abstracts, suggesting that literature of Canadian origin has taken on a more conceptual tone, while European literature has been more applied in scope.

Over one-quarter (25.8%) of the abstracts described population-based surveys and 20.4% were reviews, highlighting a lack of evaluative studies on health inequities and related interventions. Reflecting the field's strong epidemiological roots, population-based surveys constituted almost half of the Population Health abstracts (42.3%), while the other three bodies of literature offered more balance in terms of study type. Commonly employed study populations or target audiences were adults (20.5%), practitioners (17.6%), and researchers (15.0%). The high proportion of 'adults' as study populations is likely attributable to the large proportion of studies employing surveys, while the large number of reviews may account for the high proportion of 'practitioners' and 'researchers' as target audiences. By literature body, the most commonly employed study populations were practitioners in Health Promotion abstracts (21.7%), government in Healthy Cities abstracts (31.6%), and adults in Population Health (32.6%) and Urban Health (44.4%) abstracts. The focus on government suggests that the Healthy Cities literature may be the most active in prescribing roles for municipal governments.

Table 3-3: Bibliographic Characteristics by Body of Literature

	Bibliographic Characteristic	Health Promotion	Healthy Cities	Population Health	Urban Health	Total
Geographical Region	Global, Transcontinental	83 (12.9)	9 (23.7)	60 (19.5)	2 (11.1)	154 (15.3)
	Canada	227 (35.4)	8 (21.1)	172 (56.0)	2 (11.1)	409 (40.7)
	Europe	95 (14.8)	9 (23.7)	12 (3.9)	5 (27.8)	121 (12.1)
	Australia, New Zealand, Oceania	44 (6.9)	0	14 (4.6)	0	58 (5.8)
	Asia, Africa & Middle East	28 (4.4)	3 (7.9)	5 (1.6)	4 (22.2)	40 (4.0)
	Mexico, Central & South America	9 (1.4)	2 (5.3)	7 (2.3)	2 (11.1)	20 (2.0)
	United States	155 (24.2)	7 (18.4)	37 (12.1)	3 (16.7)	202 (20.1)
Study Type	Population-Based Survey	123 (19.2)	2 (5.3)	130 (42.3)	4 (22.2)	259 (25.8)
	Experimental & Quasi-Experimental	58 (9.0)	0	21 (6.8)	0	79 (7.9)
	Program or Intervention Evaluation	121 (18.9)	11 (28.9)	23 (7.5)	4 (22.2)	159 (15.8)
	Case Study (+ qualitative studies)	107 (16.7)	8 (21.1)	22 (7.2)	4 (22.2)	141 (14.0)
	Review (Systematic, Conceptual)	126 (19.7)	9 (23.7)	68 (22.1)	2 (11.1)	205 (20.4)
	Commentary	106 (16.5)	8 (21.1)	43 (14.0)	4 (22.2)	161 (16.0)
Study Population or Target Audience	Adults	96 (15.0)	2 (5.3)	100 (32.6)	8 (44.4)	206 (20.5)
	Children	51 (8.0)	0	22 (7.2)	0	73 (7.3)
	Working age adults	39 (6.1)	0	3 (1.0)	0	42 (4.2)
	Elderly, seniors, retired	22 (3.4)	0	11 (3.6)	0	33 (3.3)
	Women	41 (6.4)	0	17 (5.5)	0	58 (5.8)
	Minorities	71 (11.1)	1 (2.6)	15 (4.9)	1 (5.6)	88 (8.8)
	Practitioners	139 (21.7)	8 (21.1)	26 (8.5)	4 (22.2)	177 (17.6)
	Researchers	88 (13.7)	9 (23.7)	53 (17.3)	1 (5.6)	151 (15.0)
	Government	37 (5.8)	12 (31.6)	22 (7.2)	0	71 (7.1)
	Disabled, ill	17 (2.7)	0	7 (2.3)	0	24 (2.4)
	Unspecified	15 (2.3)	5 (13.2)	19 (6.2)	3 (16.7)	42 (4.2)
	Other	25 (3.9)	1 (2.6)	12 (3.9)	1 (5.6)	39 (3.9)
	Total	641 (100)	38 (100)	307 (100)	18 (100)	1004 (100)

3-1.3 Search Themes

The search theme combination that generated the highest number of included abstracts was Inequity-Intervention (N=506), while the Level-Location combination generated the fewest included abstracts (N=22) (Table 3-4). Of the 1004 included abstracts, 90.7% were the result of one search theme combination, 0.3% the result of two combinations, 8.8% of three combinations, and 0.2% the result of six combinations. No included abstracts were the result of four or five search theme combinations. Canada was the commonly profiled geographic origin among abstracts generated by search themes specifying Canadian locations (Table 3-5). The relationships summarized in Tables 3-4 and 3-5 validate the accuracy and utility of the search terms, as it is expected abstracts specifying municipal roles and the Canadian content would have been generated from the search terms.

The results by search theme also demonstrate some interesting characteristics of the 'health inequities' knowledge base. First, the INTERVENTION and INEQUITY themes dominated the academic literature, as they generated the greatest number of hits in the literature review. In contrast, the LEVEL theme, which specified the municipal context, generated the fewest hits in the literature review; and when these hits were generated, they were most often of European origin. These findings demonstrate the limited attention paid to municipal governments by academics in the health inequities sphere, especially in the North American context.

Table 3-4: Number of Included Abstracts by Search Theme Combination

Search Theme Combinations	Inequity & Intervention	Inequity & Level	Inequity & Location	Intervention & Level	Intervention & Location	Level & Location
Single Combo Total	506	23	181	87	374	22
Inequity & Intervention						
Inequity & Level	10					
Inequity & Location	70	2				
Intervention & Level	10	10	2			
Intervention & Location	70	2	70	15		
Level & Location	2	2	2	15	15	

Table 3-5: Geographic Origin of Abstracts by Search Theme Combinations

Search Theme Combo	Global, trans-continental	Canada	Europe	Australia, New Zealand, Oceania	Asia, Africa & Middle East	Mexico, Central & South America	United States
Inequity & Intervention	110	74	75	31	28	11	177
(% of N=506)	(21.7)	(14.6)	(14.8)	(6.1)	(5.5)	(2.2)	(35.0)
Inequity & Level	2	2	9	2	2	3	3
(% of N=23)	(8.7)	(8.7)	(39.1)	(8.7)	(8.7)	(13.0)	(13.0)
Inequity & Location	15	154	2	5	0	1	4
(% of N=181)	(8.3)	(85.1)	(1.1)	(2.8)		(0.6)	(2.2)
Intervention & Level	8	14	31	7	8	7	12
(% of N=87)	(9.2)	(16.1)	(35.6)	(8.0)	(9.2)	(8.0)	(13.8)
Intervention & Location	42	290	10	17	4	1	10
(% of N=374)	(11.2)	(77.5)	(2.7)	(4.5)	(1.1)	(0.3)	(2.7)
Level & Location	1	15	4	1	0	1	0
(% of N=22)	(4.5)	(68.2)	(18.2)	(4.5)		(4.5)	

3-2 ABSTRACT CONTENTS

To capture the overall content of the abstracts, two article themes were assigned to every included abstract. The distribution of themes across these two variables varied, although a few themes were commonly profiled (Table 3-6). Among the primary theme variable, 15.0% discussed research-related issues, 9.3% discussed healthy lifestyles, 8.6% discussed healthcare, and 7.9% discussed community development and capacity building. Among the secondary theme variable, commonly profiled themes were research (10.6%), social policy (10.5%), healthy lifestyles (9.4%), barriers and facilitators to action (9.2%), and program evaluation (9.0%). The combined distribution of these themes (i.e., average of primary and secondary themes) is displayed in Figure 3-1. The four most prominent themes are research (12.8%), healthy lifestyles (9.3%), social policy (8.1%), and healthcare (8.0%).

Abstracts discussing research-related themes tended to focus on gaps in the knowledge base, conceptual issues and debates related to health inequities, developing and employing indicators/instruments/methods for assessing the scope of inequities or impacts of intervention, and challenges to knowledge translation. Abstracts covering healthy lifestyles discussed issues ranging from diet, physical activity, substance use, and preventive screening. Social policy-themed abstracts discussed (the need for) upstream interventions, and described existing or potential social, public, health, or urban policies or plans. Topics in abstracts with healthcare themes ranged from health human resources, access, utilization, and primary care.

Table 3-6: Distribution of Primary and Secondary Article Theme Variables

Theme	Primary Theme (%)	Secondary Theme (%)
awareness of SDOH	54 (5.4)	16 (1.6)
barriers and facilitators	47 (4.7)	92 (9.2)
community development	79 (7.9)	67 (6.7)
evaluation	28 (2.8)	90 (9.0)
gender and health	31 (3.1)	22 (2.2)
geography and health	49 (4.9)	32 (3.2)
healthcare	86 (8.6)	75 (7.5)
health outcomes	28 (2.8)	79 (7.9)
healthy lifestyles	93 (9.3)	94 (9.4)
income	52 (5.2)	34 (3.4)
inter-sectoral	43 (4.3)	48 (4.8)
healthy child	58 (5.8)	32 (3.2)
mental health	13 (1.3)	7 (0.7)
minority health	36 (3.6)	34 (3.4)
occupational health	39 (3.9)	18 (1.8)
oral health	19 (1.9)	9 (0.9)
research	151 (15.0)	106 (10.6)
seniors' health	17 (1.7)	13 (1.3)
social supports	24 (2.4)	31 (3.1)
social policy	57 (5.7)	105 (10.5)
Total	1004 (100)	1004 (100)

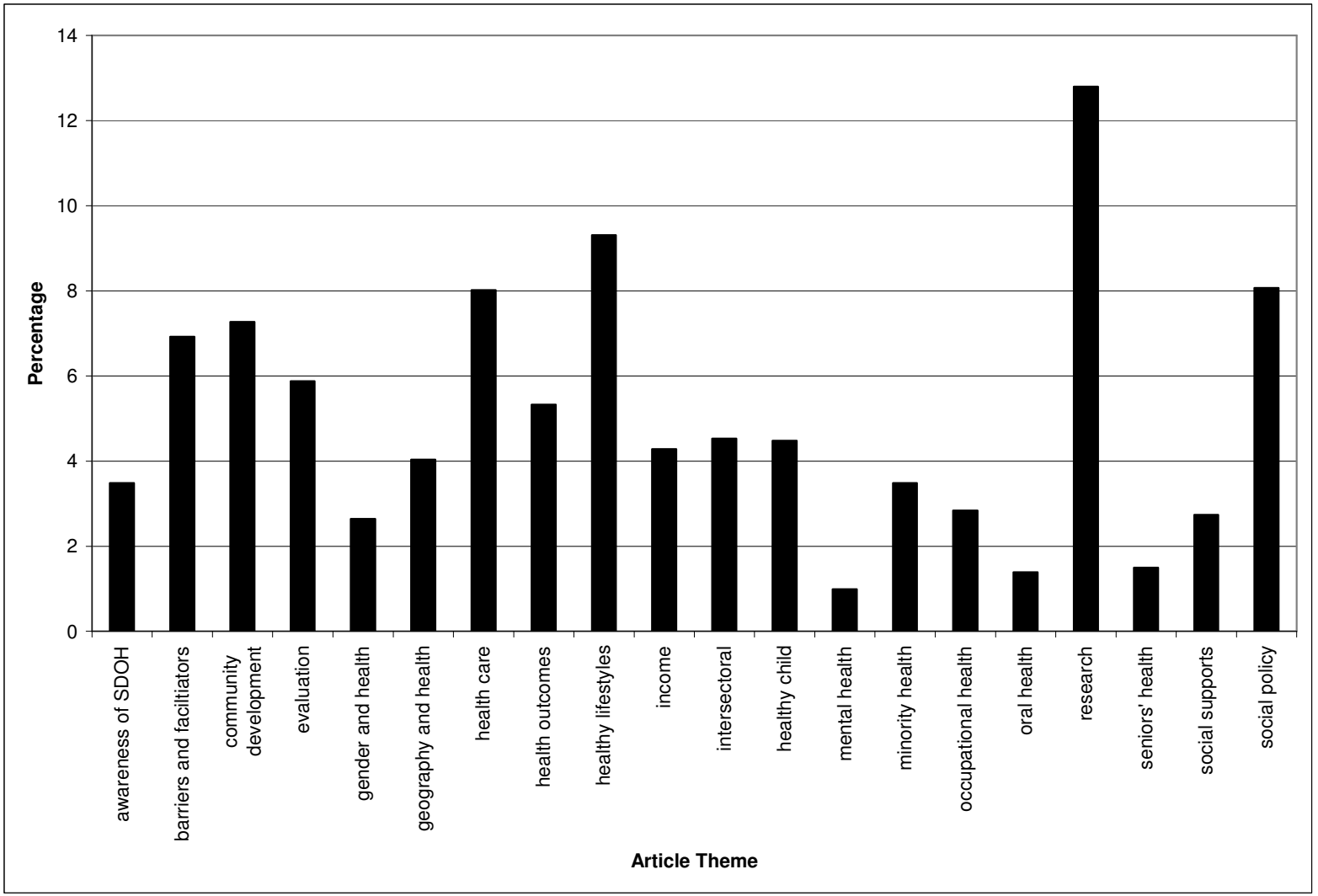


Figure 3-1: Distribution of Combined Article Themes as Percentage of Total Sample, N=1004

Health Canada's list of social determinants of health (SDOH) was used as the framework for identifying determinants mentioned in the abstracts (Health Canada 2001). Every abstract was assigned up to three SDOH, if applicable; abstracts that mentioned more than three SDOH were assigned a 'more than 3 SDOH' code, although none of the specific determinants were documented for these abstracts. Of the 1004 included abstracts, N=878 mentioned one SDOH, N=690 mentioned two SDOH, N=350 mentioned three SDOH, and N=32 mentioned more than three. Thus, the 12 SDOH were mentioned a total of 1918 times. Figure 3-2 displays the cumulative distribution of SDOH profiled by the abstracts, by summing the abstracts counts by primary, secondary and tertiary mentions. The six most commonly profiled SDOH were personal health practices and coping skills (N=393), healthcare services and systems (N=281), personal support networks and social inclusion (N=239), social environments and social safety nets (N=226), income and social status (N=213), and physical and built environment (N=192). These findings suggest a strong behavioural and biomedical tone of the health inequities knowledge base, while the high number abstracts with social and physical environment SDOH profiles likely reflects the 'local' focus of the search strategy that was employed.

A cross-tabulation was performed on these six most commonly profiled SDOH with the article themes (Table 3-7). The article themes generally correlated in content with the SDOH that was profiled: the income theme was found in 29.0% of abstracts that mentioned income as the primary SDOH; the healthy lifestyles theme was found in 28.9% of abstracts mentioning personal

health practices & coping skills as the primary SDOH; and the healthcare theme correlated with the healthcare SDOH (32.3%). Meanwhile, abstracts profiling the social supports, social environments, and physical environments determinants were correlated with a broader range of article themes. This latter finding suggests that abstracts focussing on the healthcare and personal health practices determinants are more attentive to biomedical and behavioural perspectives and issues, while articles that profile broader socioeconomic determinants tend to present similarly broad substantive themes regarding health inequities.

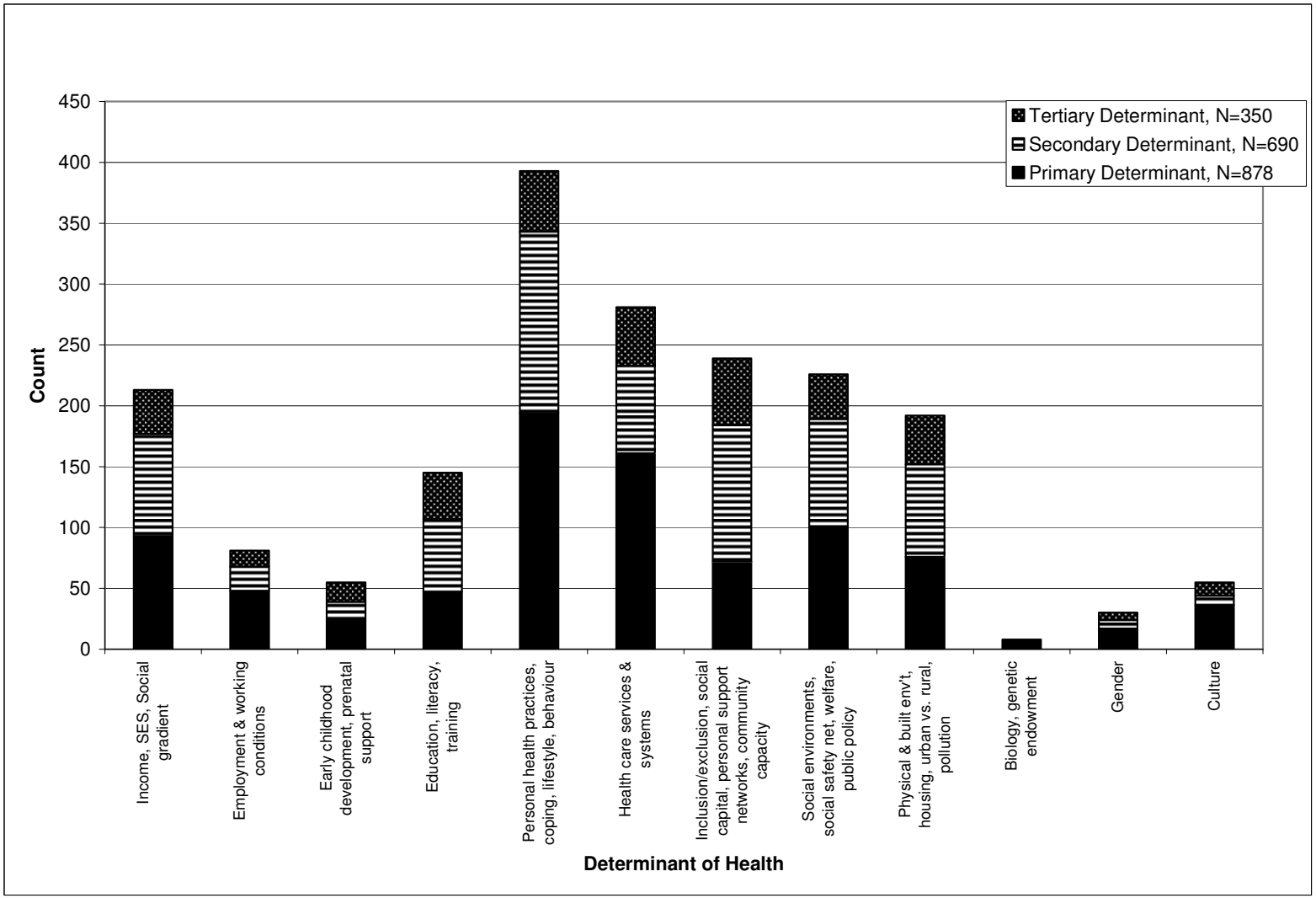


Figure 3-2: Cumulative Determinants of Health Profile for Total Mentions of an SDOH, N=1918

Table 3-7: Correlations between Combined Articles Themes and Six Most Mentioned SDOH

	Primary SDOH Most Frequently Mentioned*					
Combined Article Theme	**Income (% of N=93)**	**Personal Health Practices (% of N=194)**	**Healthcare (% of N=161)**	**Social Supports (% of N=72)**	**Social Environments (% of N=101)**	**Physical Environments (% of N=76)**
awareness of SDOH	1.6	5.4	3.7	2.8	1.5	3.3
barriers and facilitators	5.4	3.9	5.6	6.3	14.9	4.6
community development	5.4	3.1	6.2	22.9	12.9	9.2
evaluation	2.2	5.2	5.3	3.5	9.9	8.6
gender and health	2.2	2.3	2.2	2.1	3.0	0.0
geography and health	3.8	2.6	1.6	5.6	1.5	22.4
healthcare	3.2	2.3	32.3	6.3	1.5	3.3
health outcomes	9.7	6.4	2.5	3.5	2.0	5.9
healthy lifestyles	4.8	28.9	7.5	1.4	2.0	1.3
income	29.0	1.8	2.8	2.1	1.0	3.3
inter-sectoral	2.2	2.8	4.7	9.7	6.9	7.2
healthy child	2.7	5.9	1.9	2.1	1.5	2.0
mental health	0.0	1.0	1.6	1.4	2.0	0.0
minority health	1.6	2.3	3.1	2.8	2.0	0.7
occupational health	0.0	4.1	0.3	0.0	0.0	0.0
oral health	2.7	1.8	1.6	0.7	1.0	0.7
research	5.9	5.2	9.3	13.9	18.8	16.4
seniors' health	1.6	1.8	2.8	3.5	1.0	0.0

	Primary SDOH Most Frequently Mentioned*					
Combined Article Theme	**Income (% of N=93)**	**Personal Health Practices (% of N=194)**	**Healthcare (% of N=161)**	**Social Supports (% of N=72)**	**Social Environments (% of N=101)**	**Physical Environments (% of N=76)**
social supports	**2.7**	**7.0**	**0.0**	**6.3**	**0.5**	**0.7**
social policy	**13.4**	**6.2**	**5.3**	**3.5**	**16.3**	**10.5**
Total	**100**	**100**	**100**	**100**	**100**	**100**

*Based on being mentioned as the primary SDOH in over 50 abstracts, and cumulatively in over 150 abstracts (see figure 2).

Table 3-8 summarizes the distribution of the discourses employed to describe differences in health outcomes, across the four bodies of literature. The majority of abstracts refrained from employing a highly political discourse to discuss the issues, and simply framed the content around health outcomes and/or the SDOH. The remainder of the abstracts framed their discussions of health differences as inequities (5.8%), inequalities (13.0%), and disparities (10.4%). Over three-quarters (76.6%) of Health Promotion abstracts employed the outcomes discourse; nearly one-quarter (23.7%) of Healthy Cities abstracts employed the inequities discourse; and over one-fifth (21.8%) of Population Health abstracts spoke of health inequalities. That the Healthy Cities abstracts were the most likely to employ the 'inequities' discourse suggests that, compared to their intellectual counterparts, Healthy Cities scholars are less apprehensive about attributing health differences to injustices and advocating the need to address social inequities to reduce differences in health outcomes.

Table 3-8: Distribution of Discourses Employed Across the Four Literature Bodies

Literature Body	Discourse				Total
	Inequities	Inequalities	Disparities	Outcomes, SDOH	
Health Promotion	27 (4.2)	59 (9.2)	64 (10.0)	491 (76.6)	641 (100)
Healthy Cities	9 (23.7)	2 (5.3)	1 (2.6)	26 (68.4)	38 (100)
Population Health	19 (6.2)	67 (21.8)	39 (12.7)	182 (59.3)	307 (100)
Urban Health	3 (16.7)	3 (16.7)	0	12 (66.7)	18 (100)
Total	58 (5.8)	131 (13.0)	104 (10.4)	711 (70.8)	1004 (100)

3-3 CHANGES IN LITERATURE OVER TIME

The changes in publication activity in the four bodies of literature are displayed in Figure 3-3 and Figure 3-4. Publication activity increased over the 20-year period (Figure 3-3), and the overwhelming majority of publications were generated from the HP and PH literature bodies. Publication activity in the HP and PH literatures increased almost every year, while the HC and UH literatures demonstrated slight increases in the 1999-2001 time period. These findings demonstrate the ongoing growth of research programs on health inequities, and the establishment of the health inequities knowledge base.

Figure 3-4 displays the relative contributions of the four bodies of literature over the 20-year period. The first decade was dominated by publication activity from the HP and HC literatures, with PH and UH literatures never constituting more than 40% of the publication activity. Publication activity in the second decade changes, as the PH and UH literatures constituted at least half of the publications in almost every year (except 1999 and 2001). These findings confirm the historical developments of the four bodies of literature, as described in section 1-1.3.

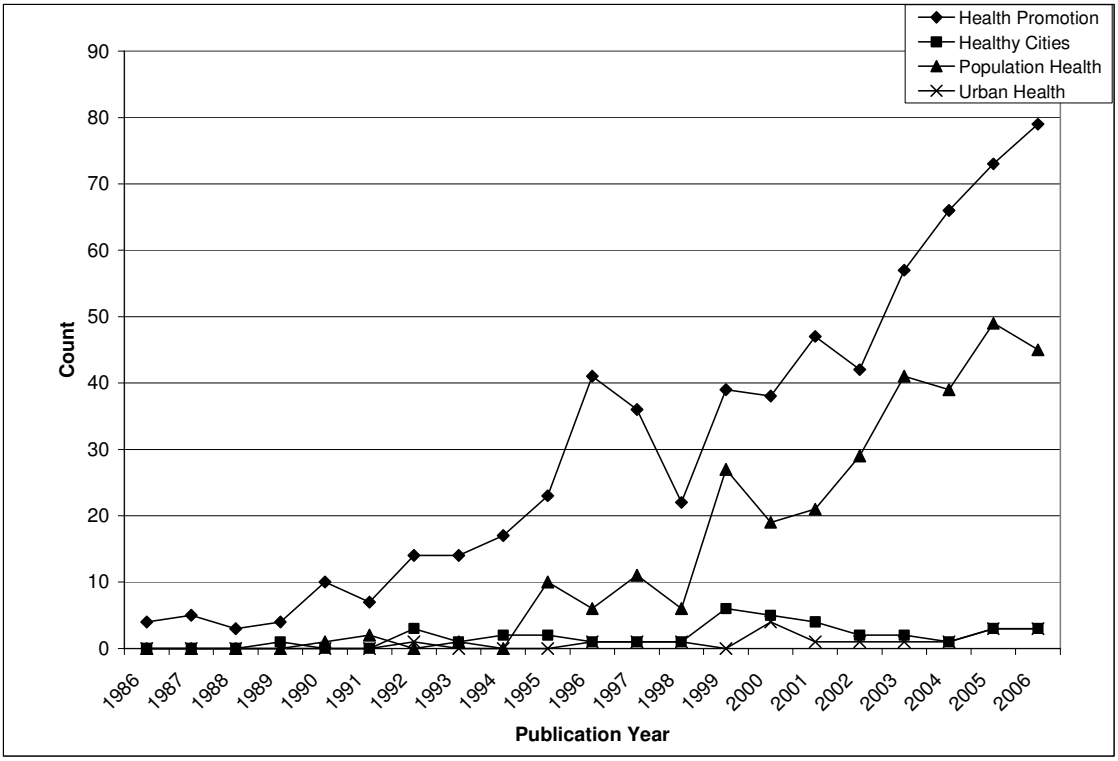


Figure 3-3: Total Publication Activity over Time by Literature Body

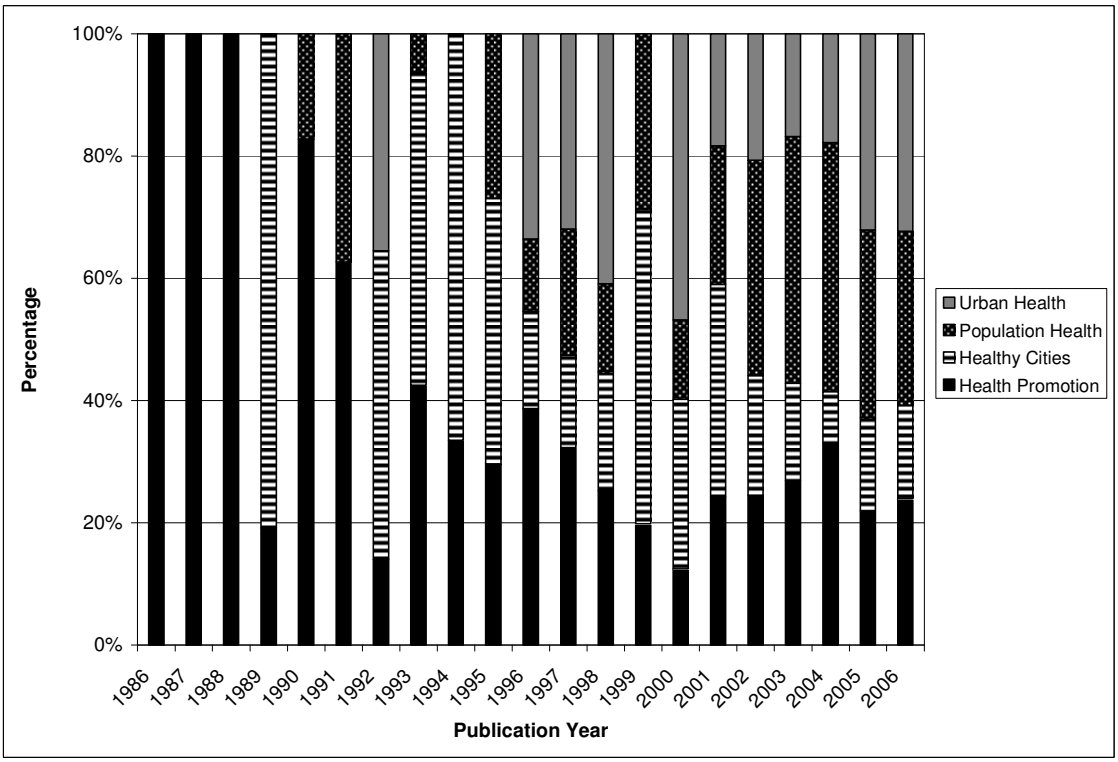


Figure 3-4: Relative Contribution of Literature Bodies by Publication Year

Changes in article themes over time are displayed in Table 3-9, using five-year increments to simplify the analyses. The 'barriers and facilitators' and 'social policy' article themes were highest in the first five years. The 'healthcare' theme increased dramatically after this first time period, while the 'healthy lifestyles' themes maintained substantial attention throughout the entire 20-year period. Similar findings were observed for the distribution of the SDOH over the four five-year time increments (Figure 3-5). The 'personal health practices' determinant maintained the highest coverage over the entire time period, and discussions of 'healthcare' increased dramatically over time. Meanwhile, the determinants of 'education and literacy', 'social support networks' and 'social environments' started out relatively high, but lost their prominence over the remaining three time frames. Taken together, these findings suggest that broader and more critical perspectives on health inequities were prominent in the early stages of development of the knowledge base, but that over time, these perspectives gave way to a focus on behavioural explanations for, and biomedical solutions to, health inequities.

Table 3-10 displays the changes in discourses employed to describe differences in health outcomes over time. In each of the five-year increments, the apolitical outcomes-focussed discourse was dominant, although slight shifts are observable in the other three discourses. The inequities discourse was most commonly employed in the 1992-1996 time period, while the inequalities and disparities discourses were most commonly employed in the 2002-2006 time period. The temporal shift towards the more apolitical discourses of inequalities

and disparities may be due to a growing ideological conservatism (e.g., neoliberal shifts away from supporting redistributive policies) and/or academic pragmatism (e.g., appeasing the ideological positions of funders and journals) among health inequities scholars over the 20-year timeframe.

Table 3-9: Combined Article Themes by Five-Year Increments

	Timeframe				
Combined Article Theme	**1986-1991**	**1992-1996**	**1997-2001**	**2002-2006**	**Total**
awareness of SDOH	4 (5.4)	15 (5.5)	27 (4.7)	24 (2.2)	70 (3.5)
barriers and facilitators	7 (9.5)	23 (8.4)	41 (7.1)	68 (6.3)	139 (6.9)
community development	3 (4.1)	19 (6.9)	48 (8.3)	76 (7.0)	146 (7.3)
evaluation	5 (6.8)	23 (8.4)	28 (4.8)	62 (5.7)	118 (5.9)
gender and health	1 (1.4)	8 (2.9)	13 (2.2)	31 (2.9)	53 (2.6)
geography and health	2 (2.7)	10 (3.6)	23 (4.0)	46 (4.3)	81 (4.0)
healthcare	1 (1.4)	24 (8.8)	47 (8.1)	89 (8.2)	161 (8.0)
health outcomes	5 (6.8)	14 (5.1)	27 (4.7)	61 (5.6)	107 (5.3)
healthy lifestyles	8 (10.8)	24 (8.8)	55 (9.5)	100 (9.3)	187 (9.3)
income	1 (1.4)	7 (2.6)	24 (4.1)	54 (5.0)	86 (4.3)
Inter-sectoral	2 (2.7)	13 (4.7)	27 (4.7)	49 (4.5)	91 (4.5)
healthy child	4 (5.4)	10 (3.6)	26 (4.5)	50 (4.6)	90 (4.5)
mental health	1 (1.4)	2 (0.7)	6 (1.0)	11 (1.0)	20 (1.0)
minority health	1 (1.4)	6 (2.2)	13 (2.2)	50 (4.6)	70 (3.5)
occupational health	2 (2.7)	14 (5.1)	13 (2.2)	28 (2.6)	57 (2.8)
oral health	1 (1.4)	5 (1.8)	7 (1.2)	15 (1.4)	28 (1.4)
research	13 (17.6)	32 (11.7)	76 (13.1)	136 (12.6)	257 (12.8)
seniors' health	1 (1.4)	3 (1.1)	8 (1.4)	18 (1.7)	30 (1.5)
social supports	2 (2.7)	1 (0.4)	17 (2.9)	35 (3.2)	55 (2.7)
social policy	10 (13.5)	21 (7.7)	54 (9.3)	77 (7.1)	162 (8.1)
Total	74 (100)	274 (100)	580 (100)	1080 (100)	2008 (100.0)

Table 3-10: Changes in Discourse for Health Differences by Five-Year Increments

	Discourse				
Timeframe	**Inequities**	**Inequalities**	**Disparities**	**Outcomes, SDOH**	**Total**
1986-1991	3 (8.1)	3 (8.1)	3 (8.1)	28 (75.7)	37 (100)
1992-1996	12 (8.8)	12 (8.8)	6 (4.4)	107 (78.1)	137 (100)
1997-2001	17 (5.9)	37 (12.8)	12 (4.1)	224 (77.2)	290 (100)
2002-2006	26 (4.8)	79 (14.6)	83 (15.4)	352 (65.2)	540 (100)
Total	58 (5.8)	131 (13.0)	104 (10.4)	711 (70.8)	1004 (100)

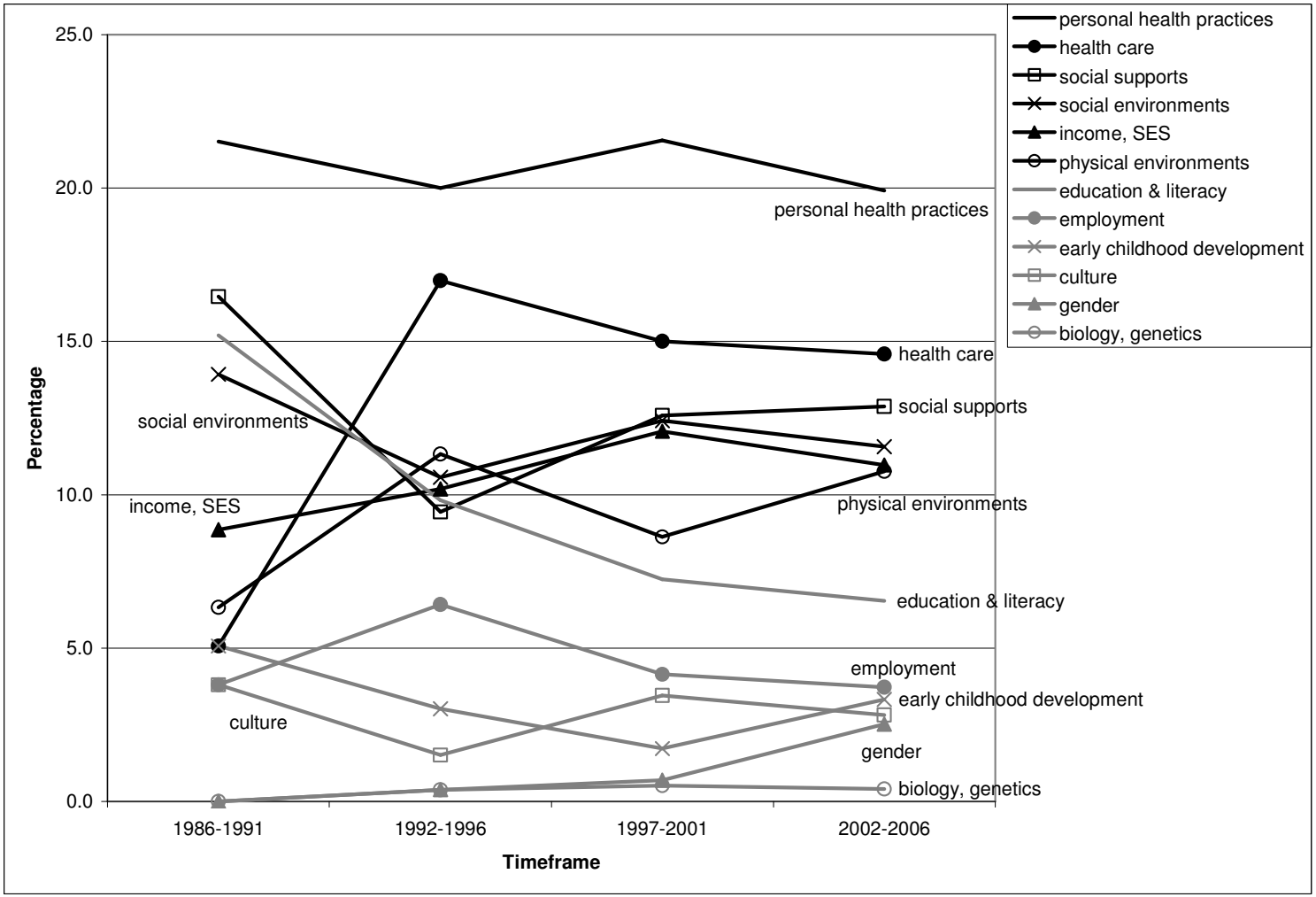


Figure 3-5: Distribution of SDOH as Percentage by Five-Year Increments (N=1918)

3-4 IMPLICATING MUNICIPAL GOVERNMENTS

Only 171 abstracts (17.0%) implicated municipal governments in the task of addressing health issues (Table 3-11).[29] The majority of Healthy Cities (78.9%) and Urban Health (55.6%) abstracts implicated municipal governments, while such implications were made in only a minority of abstracts from Health Promotion (14.7%) and Population Health (12.1%). These findings suggest that the Healthy Cities and Urban Health literatures offer more applied (i.e., policy-focused) perspectives on health inequities than those offered by the Health Promotion and Population Health literatures.

The geographic origins of these abstracts reveal some interesting trends. The majority of abstracts of a Mexican, Central and/or South American origin implicated municipalities (65%), while abstracts of American origin were least likely to implicate municipalities (8.4%). The greatest number of abstracts implicating municipalities emerged from Canada (N=48),[30] while the fewest came from Asia, Africa & the Middle East (N=11). Considering the relatively large number (N=41), and high percentage (N=33.9%), of abstracts implicating municipalities, it is reasonable to argue that, on the whole, the European literature was the most vocal with respect to the potential roles and responsibilities of municipal governments in addressing local health issues.

[29] It is important to note in these 171 abstracts that discussed municipalities, it was in addressing 'health issues or concerns' at the local level, rather than reducing 'health inequities' per se, that municipal governments tended to be implicated.

[30] Likely an artefact of the sampling process that prioritized retrieving articles with a Canadian focus.

Table 3-11: Implications of Municipal Governments by Literature Body and Geographic Origin

		N Abstracts Implicating Municipalities	% Abstracts Implicating Municipalities
Body of Literature	Health Promotion	94	14.7
	Healthy Cities	30	78.9
	Population Health	37	12.1
	Urban Health	10	55.6
Geographical Origin	Global, transcontinental	29	18.8
	Canada	48	11.7
	Europe	41	33.9
	Australia, New Zealand, Oceania	12	20.7
	Asia, Africa & Middle East	11	27.5
	Mexico, Central & South America	13	65.0
	United States	17	8.4
Total		171	17.0

Comparisons made between the contents of the abstracts that implicated municipal governments (N=171) and the entire sample (N=1004) are depicted in Figure 3-6 and Figure 3-7. Abstracts implicating municipalities emphasized the following article themes (Figure 3-6): barriers and facilitators to addressing the SDOH; community development, capacity building, and mobilization; program or project evaluations or descriptions; geography, place, space, location, built environments, and health; inter-sectoral partnerships and collaborations; and social, public, health, or urban policy and planning. Meanwhile, 'social environments' and 'physical environments' were the most commonly profiled determinants among abstracts implicating municipalities, compared to 'personal health practices' and 'healthcare' in the sample as a whole (Figure 3-7). Compared to the sample as a whole, abstracts implicating municipalities were much more likely to focus on issues of environmental or local concern, and less likely to focus on biomedical or behavioural issues.

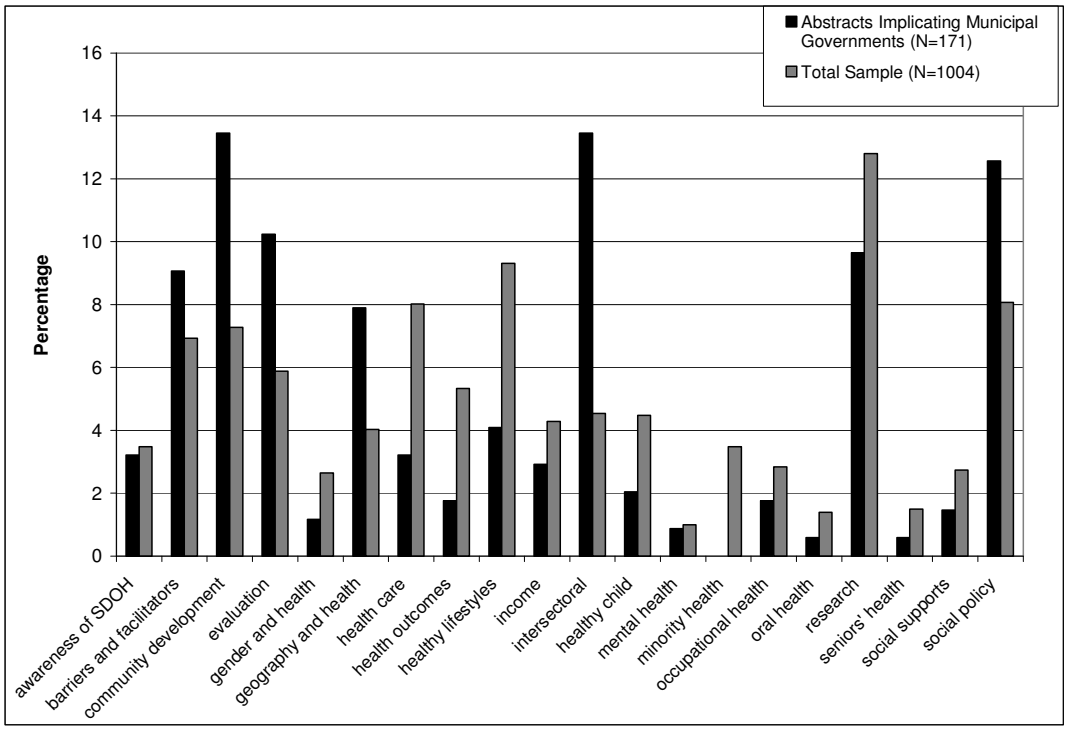


Figure 3-6: Comparison of Combined Article Themes between Abstracts Implicating Municipal Governments versus Entire Sample

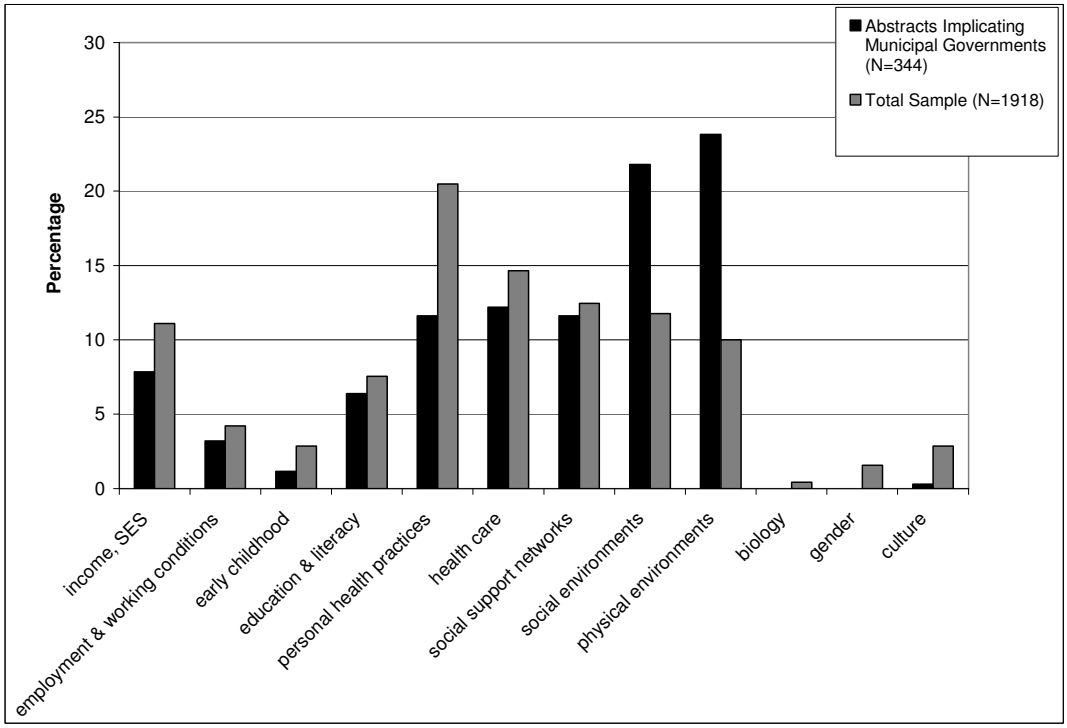


Figure 3-7: Comparison of Combined SDOH Profile between Abstracts Implicating Municipalities versus Entire Sample

The types of roles that were implicated, and the geographic origins of the abstracts that made those implications, are summarized in Table 3-12. A total of seven major categories of roles emerged from the literature review. 'Joining or building on existing local health networks' (N=41) and 'improving the social, economic, and built environment' (N=39) were the two most commonly prescribed roles for municipal governments in the literature, while 'improving inter-governmental relations' was the least prescribed role (N=12).

The seven categories of roles were emphasized to varying extents across the different geographical regions of origin. In abstracts of Canadian, European, and Australian & New Zealand origin, the most commonly prescribed role was to 'join or build on existing local health networks'. Canadian abstracts also emphasized the need for greater 'intra-municipal capacity building' to tackle local health issues. 'Improving the social, economic, and built environments' was the most commonly prescribed role among abstracts of a global/transcontinental origin, and of a Mexican, South & Central American origin, while abstracts of American origin stressed the need for municipalities to 'conduct health impacts assessments, and assess local needs'. The varying emphases placed on potential roles likely speak to the diverse jurisdictional responsibilities of municipal governments across, and even within, countries, as well as the unique, and highly specific, health and social issues facing municipal governments within these countries.

Table 3-12: Types of Roles Implicated and Geographic Origin of Abstracts Making Implications

Roles	Global, transcontinental (Total N=154)	Canada (Total N=409)	Europe (Total N=121)	Australia, New Zealand, Oceania (Total N=58)	Asia, Africa & Middle East (Total N=40)	Mexico, Central & South America (Total N=20)	United States (Total N=202)	Total Abstracts by Municipal Role
1. conduct health impact assessments, assess local needs	2 (6.9)	5 (10.4)	3 (7.3)	2 (16.7)	2 (18.2)	1 (7.7)	5 (29.4)	20 (11.7)
2. deliver health promotion, public education programs on healthy lifestyles	0 (0.0)	4 (8.3)	5 (12.2)	2 (16.7)	3 (27.3)	3 (23.1)	2 (11.8)	19 (11.1)
3. develop inter-sectoral, intergovernmental partnerships	6 (20.7)	3 (6.3)	4 (9.8)	2 (16.7)	0 (0.0)	0 (0.0)	2 (11.8)	17 (9.9)
4. improve intergovernmental relations, clarify jurisdictional responsibilities	0 (0.0)	3 (6.3)	6 (14.6)	2 (16.7)	0 (0.0)	1 (7.7)	0 (0.0)	12 (7.0)
5. improve capacity within local government, be a leader, advocate	0 (0.0)	10 (20.8)	6 (14.6)	0 (0.0)	3 (27.3)	2 (15.4)	2 (11.8)	23 (13.5)
6. join/build on existing networks, partnerships, be an active participant	7 (24.1)	16 (33.3)	11 (26.8)	3 (25.0)	0 (0.0)	2 (15.4)	2 (11.8)	41 (24.0)
7. improve social, economic, built environments through public policy	14 (48.3)	7 (14.6)	6 (14.6)	1 (8.3)	3 (27.3)	4 (30.8)	4 (23.5)	39 (22.8)
Total Abstracts Implicating Municipal Governments	29 (100.0)	48 (100.0)	41 (100.0)	12 (100.0)	11 (100.0)	13 (100.0)	17 (100.0)	171 (100.0)

A series of passages from abstracts that implicated municipal governments are provided below as exemplary of *some* of the key themes that emerged from these abstracts.

Role 1: Conduct health impact assessments, assess local needs

As illustrated by the following three passages, abstracts that implicated municipal governments in this type of role stressed (among other themes) the importance of collecting population-wide data on health and social needs at the municipal level (Simon, Wold et al. 2001); utilizing data already available within municipal governments in planning local health and social services (Fone, Jones et al. 2002); and engaging with local residents in identifying, and conceptualizing solutions to, local health problems (Mittelmark 2001).

> Monitoring the health status of populations is a core function of all public health agencies but is particularly important at the municipal and community levels, where population health data increasingly are used to drive public health decision making and community health improvement efforts…To address gaps in local health data, in 1997 the Los Angeles County Department of Health Services inaugurated the Los Angeles County Health Survey. (Simon, Wold et al. 2001)

> Primary care organisations in the United Kingdom have been given new and challenging population health responsibilities to improve health and address health inequality in local communities through partnership working with local authorities. This requires robust health and social needs assessment data for effective local planning...Local authority data can help primary care organisations in a population approach to needs assessment for use in local partnership planning targeted at reducing health inequalities. (Fone, Jones et al. 2002)

> Health impact assessment identifies negative health impacts that call for policy responses, and identifies and encourages practices and policies that promote health…Evidence from [People Assessing Their Health] demonstrates that low technology health impact assessment, done by and for local people, can shift thinking beyond the illness problems of individuals. It can bring into consideration, instead, how programmes and policies support or weaken community health, and illuminate a community's capacity to improve local circumstances for better health. (Mittelmark 2001)

Role 2: Deliver health promotion, public education programs on healthy lifestyles

Diverse prescriptions emerged for how municipal governments could become involved in the actual delivery of health-focused interventions. In the Canadian context, many of these prescriptions arose from the community-based heart health initiatives being implemented across the country (Stachenko 1996). Tobacco-cessation programs targeting children in disadvantaged neighbourhoods, for instance, clearly require the cooperation of municipal governments for their successful implementation (Renaud, O'Loughlin et al. 2003). In Tokyo Japan, municipal Mayors are designating individuals to lead their communities to healthier lifestyles (Yajima, Takano et al. 2001), while nearly a decade earlier, Rennes France incorporated health goals into all of its municipal decision-making (Sabouraud 1992).

> The St-Louis du Parc Heart Health Project was a five year heart health promotion programme targeting children in eight elementary schools aged 9-12 years in disadvantaged multiethnic neighbourhoods in Montreal…Elementary school based interventions should aim to develop a clear and coherent social norm about the non-use of tobacco, as a precursor to or in close conjunction with having children as their primary target...Neighbourhood level interventions should be orchestrated to complement regional, provincial, and national programmes. (Renaud, O'Loughlin et al. 2003)

> The aim of this study was to evaluate a community-based health promotion programme…In this programme, 20 people are selected every 2 years in each municipality from the lay people of the community, and they are designated as members of a 'community leaders' committee' by the Mayor. They, as a group, have opportunities to gain knowledge about and skills in healthy lifestyles, and undertake voluntary activities to serve the community…this community participation approach, employing a committee style, was effective in improving health-related behaviour and in promoting health literacy while overcoming socio-economic variation. (Yajima, Takano et al. 2001)

> In 1989, the city of Rennes, France created its healthy city committee consisting of people from different sectors to strengthen health and the environment and to encourage public participation. It organized existing activities and integrated the health dimension into municipal decisions at all levels...healthy city projects included noise abatement actions, family gardens, a health information and documentation center, creation of a sexually transmitted disease/AIDS group, and roof safety campaigns…The healthy cities approach cannot be just the responsibility of municipal authorities but also requires the backing of national governments and international groups. (Sabouraud 1992)

Role 3: Develop inter-sectoral, intergovernmental partnerships

Prescriptions for this role were broadest in scope and similar across abstracts. These prescriptions generally emphasized the need for municipalities to form strong, functional relationships with senior levels of government, to ensure that local governments have sufficient political and economic support to adequately address health and social issues at the local level.

> Based upon the Ottawa Charter, a range of complementary strategies can be implemented in partnership with relevant local, national and international agencies. At the core of this public health approach is the need to empower local communities to become actively involved in efforts to promote their oral health. (Watt 2005)

> The Canadian Heart Health Initiative is a country-wide strategy for the prevention of cardiovascular disease…key features of the Initiative are translation of the science base in prevention into

> community programs; consensual policy development; federal and provincial co-funding arrangements; key role played by the public health system; capacity building; organization and management model linking activities at the national, provincial and community levels. (Stachenko 1996)

> Healthy City projects allow Ministries of Health to develop stronger partnerships with local government organizations...It is recognized that city networking--at national, regional, and international levels--now must be better exploited by individual cities and municipalities to solve local health problems. (Goldstein 2000)

Role 4: Improve intergovernmental relations, clarify jurisdictional responsibilities

Themes that often emerged from these abstracts stressed the importance of municipalities requiring a clear policy vision (Kennedy 2001) and strategic direction (Nutbeam 1999) from senior governments to warrant prioritizing health inequities within municipal decision-making, as well as the necessary autonomy and authority to effectively address these issues at the local level (Wistow 2001).

> In the UK, government has committed itself to improving health and reducing inequalities in health. For the first time, issues such as food poverty will be addressed by tackling the causes of poverty and wider determinants of ill health. The time has never been better, therefore, for health and local authorities to work collaboratively to promote and improve health. (Kennedy 2001)

> Health goals and targets have been widely used to indicate strategic direction and priority for health improvement on a population basis...[this paper] suggests for Canada an ideal combination of a national population health framework to guide direction and priority, to be implemented through action at a more local level, through well-defined partnerships. (Nutbeam 1999)

> …if the economic, social and environmental causes of ill health are to be addressed more generally and if citizens are to be enabled to live in healthy, sustainable communities, planning for health services should logically be subordinate to planning for health. Health improvement plans should, therefore, be integrated within

> the wider community strategies for which local authorities are to have lead responsibility. (Wistow 2001)

Role 5: improve capacity within local government, be a leader, advocate

As with Role 3, prescriptions for municipal activity that fell under this category tended to be broad in scope and similar across abstracts. The need for municipal governments to be strong leaders and advocates for addressing local health inequities were recurrent themes (Labonte 1993; Dressendorfer, Raine et al. 2005), as was the prescription that municipal policy-makers and program coordinators for health-focused initiatives have sufficient knowledge and expertise (i.e., capacity) to effectively lead such initiatives (Donchin, Shemesh et al. 2006).

> A new public health practice is emerging, apparent in initiatives like the international healthy cities/communities projects...There are five functional roles for local government: policy, legislation, education, partnerships and advocacy. (Labonte 1993)

> Effective implementation of community health initiatives to promote heart health can be conceptualized as the involvement of local leadership, policy advocacy, and enhancement of existing infrastructure. (Dressendorfer, Raine et al. 2005)

> The objectives were to evaluate the level of implementation of the 'Healthy Cities' principles and strategies in each network city and to assess the contribution of the network to its member cities…It appears that political commitment and support is a significant enabling condition, which, together with the capacity building of the coordinator, may lead to better implementation of Healthy Cities' policy. (Donchin, Shemesh et al. 2006)

Role 6: Join/build on existing networks, partnerships, be an active participant

This commonly prescribed role was diversely conceptualized across abstracts, in terms of relevant actors and types of networks that were

emphasized. Some abstracts spoke generally about the need for institutionalized local public health networks with municipal governments as key contributors (Guldbrandsson, Bremberg et al. 2005), while others offered more specific discussions of how a range of actors (including municipalities) could facilitate a model of health promotion at the local level (Weinehall, Hellsten et al. 2001). Canadian abstracts discussed the results of municipalities working with local health units and community agencies on the SDOH (Gardner, Arya et al. 2005), as well as the opportunities presented by the school setting to gather diverse actors to implement health promotion programs locally (McCall, Rootman et al. 2005).

> The Swedish municipalities offer important environments for health promotion. However, national actors need increased knowledge on how to support the development of public health measures in the municipalities…The dissemination of knowledge about public health related international and national policy documents and support for the institutionalisation of a local public health sector might be useful ways to support municipal public health measures. (Guldbrandsson, Bremberg et al. 2005)

> It was possible in Norsjo to create a local health promotion collaboration between healthcare providers, grocery stores, schools, municipal authorities, and the public in order to develop a Swedish model for community intervention. The different programme components were well received by the public. (Weinehall, Hellsten et al. 2001)

> There is growing interest in improving population health by multi-sectorial partnerships that address the determinants of health. The Leeds, Grenville and Lanark District Health Unit worked with some 80 other community agencies to form the Lanark, Leeds and Grenville Health Forum in the spring of 2000...The experience of the Leeds, Grenville and Lanark Health Forum offers a practical model for public health units to work with partner agencies to address the determinants of health, as well as some insights into

> the requirements to sustain such a model. (Gardner, Arya et al. 2005)

> In Canada, researchers, policy-makers and non-governmental organisations have re-conceptualized the school setting as being an ecological entity, linked to parallel ecologies of the homes and the community it serves. The school, public health and other systems that seek to deliver programs in that setting are open, loosely coupled and bureaucratic. This reconceived view of the school as a setting for health promotion leads to an emphasis on building organizational, system, professional and community capacity…In recent health promotion research, networking at various levels, across sectors and within communities is viewed as a key strategy within new, more effective health promotion strategies. (McCall, Rootman et al. 2005)

Role 7: Improve social, economic, built environments through public policy

Abstracts that prescribed this role emphasized the need for municipal governments to improve the social conditions of daily living in cities. Some abstracts adopted broad perspectives, discussing the need to reconnect public health and urban planning (Northridge, Sclar et al. 2003), while others focused on specific issues such as the provision of low-income housing (Welch and Kneipp 2005), or the links between socio-spatial inequities and elementary school performance (Kozyrskyj, Fergusson et al. 2002). Abstracts of Mexican, South & Central American origin tended to stress the need for municipal governments to develop basic infrastructure and services (i.e., sewage, water filtration, waste removal) to facilitate healthier living conditions (Andrade, Bareta et al. 2005), signalling the stark contrast in health issues, and responsibilities therein, that confront municipalities in the developing world.

> The overarching goal of this article is to make explicit the multiple pathways through which the built environment may potentially affect health and well-being...We contend that to plan for healthy cities, we need to reinvigorate the historic link between urban planning

and public health, and thereby conduct informed science to better guide effective public policy. (Northridge, Sclar et al. 2003)

Decent, affordable housing is the building block of healthy neighborhoods…This article presents historical and current issues in low-income housing policy, discusses how low-income housing policy has contributed to social inequalities in health…(Welch and Kneipp 2005)

Children living in neighbourhoods with less healthy populations were more likely to have poorer school performance, as indicated by Grade 3 math standards test scores. They were-also more likely to change schools, less likely to participate in sports, and had decreased access to affordable food and licenced day care…We documented regional variation in the availability of resources to support healthy childhood development. (Kozyrskyj, Fergusson et al. 2002)

In Sobral, a municipality of 173,000 inhabitants in Ceara in the North-eastern region of Brazil, a number of municipal policies were initiated beginning in 1997…including an increase in the public supply of drinking water from 65% to 97% of households; an increase in sewage networks from 7% to 65%; an increase in public refuse collection from 42% to 90%; the expansion of green areas; the construction of nine kilometres of bicycle paths; the universalisation of integral health care through the Family Health Strategy through a network with specialised out-patient and hospital services; and a 148% increase in the number of children enrolled in primary school. (Andrade, Bareta et al. 2005)

CHAPTER 4: SURVEY RESULTS

4-1 OBJECTIVES OF THE SURVEY ANALYSIS

As discussed in section 2-3.7, the objectives of the survey were fourfold:

1) To assess participants' understanding of and attitudes towards the SDOH;
2) To assess the capacity of municipalities, in general, to address local health disparities;
3) To elicit information on the extent and nature of participating municipalities' efforts to address local health disparities; and
4) To assess the relationship between municipal actors' attitudes and municipal governments' capacities for action on health disparities.

The bulk of the survey results are framed around addressing these four objectives. But first, the general characteristics of survey participants are reported.

4-2 GENERAL CHARACTERISTICS OF PARTICIPANTS

The overall response rate for the survey was 345/637[31] (54.2%) (Table 4-1). The City of Port Moody generated the lowest response rates (23%), likely attributable to concerns held (and expressed) by its City Manager that the survey represented an opportunity for offloading of responsibilities by senior governments. In the City of Langley, the importance of the survey was disseminated by a human resources manager to the staff, which likely accounts for it having the highest response rate (68%). While the response rate for non-elected officials was as expected (56%), the response rate for elected officials (48%) was surprisingly high, given their elite role in the municipality, and the likelihood that most had other sources of employment that vied for their time. That police departments had the highest response rate (77%) suggests a higher

[31] Fifteen contacts from the original sample were removed after the original mail-out when it was discovered they were no longer with the municipality.

than expected level of engagement with these issues by local police forces. In contrast, the low participation rate from parks, recreation & community services departments (47%) was surprising, given that health issues at the local level are typically associated with parks and recreation facilities.

Table 4-1: Response Rates by Municipality, Elected versus Non-Elected, and Department

		# of Participants	% of Participants	# Total Sample	% Total Sample	Response Rate
Municipality	**City of Burnaby**	**21**	**6.09**	**37**	**5.81**	**56.76**
	City of Langley	**17**	**4.93**	**25**	**3.92**	**68.00**
	City of North Vancouver	**22**	**6.38**	**34**	**5.34**	**64.71**
	City of Coquitlam	**20**	**5.80**	**34**	**5.34**	**58.82**
	Corporation of Delta	**16**	**4.64**	**37**	**5.81**	**43.24**
	District of North Vancouver	**24**	**6.96**	**44**	**6.91**	**54.55**
	District of Maple Ridge	**26**	**7.54**	**47**	**7.38**	**55.32**
	City of New Westminster	**10**	**2.90**	**17**	**2.67**	**58.82**
	City of Port Coquitlam	**15**	**4.35**	**27**	**4.24**	**55.56**
	City of Pitt Meadows	**9**	**2.61**	**15**	**2.35**	**60.00**
	City of Port Moody	**7**	**2.03**	**30**	**4.71**	**23.33**
	City of Richmond	**44**	**12.75**	**71**	**11.15**	**61.97**
	City of Surrey	**18**	**5.22**	**34**	**5.34**	**52.94**
	Township of Langley	**17**	**4.93**	**31**	**4.87**	**54.84**
	City of Vancouver	**49**	**14.20**	**100**	**15.70**	**49.00**
	City of White Rock	**11**	**3.19**	**25**	**3.92**	**44.00**
	District of West Vancouver	**19**	**5.51**	**29**	**4.55**	**65.52**
Position[32]	**Elected**	**64**	**18.55**	**133**	**20.88**	**48.12**
	Non-Elected	**281**	**81.45**	**504**	**79.12**	**55.75**
Department	**City Council**	**64**	**18.66**	**133**	**20.88**	**48.12**

[32] In constructing the contact list, position information was inconclusive due to incomplete information on municipality websites. Thus, response rates by position could not be calculated.

		# of Participants	% of Participants	# Total Sample	% Total Sample	Response Rate
	City Manager	**21**	**6.12**	**36**	**5.65**	**58.33**
	Corporate Services	**87**	**25.36**	**167**	**26.22**	**52.10**
	Engineering & Operations	**33**	**9.62**	**66**	**10.36**	**50.00**
	Parks, Recreation & Community Services	**47**	**13.70**	**100**	**15.70**	**47.00**
	Planning & Development	**38**	**11.08**	**59**	**9.26**	**64.41**
	Fire & Rescue	**24**	**7.00**	**34**	**5.34**	**70.59**
	Police	**20**	**5.83**	**26**	**4.08**	**76.92**
	Libraries	**9**	**2.62**	**16**	**2.51**	**56.25**
Total		**345**	**100.00**	**637**	**100.00**	**54.16**

The majority of participants were male (64%), had an undergraduate degree or higher (70%), had an annual household income of over $100,000 (81%), and rated their health as excellent or very good (79%) (Table 4-2). The positions of participants were diverse; 19% were elected officials (i.e., city councillors or mayors), 19% were directors or general managers of departments, and 31% were managers of units within major municipal departments. The remaining 30% of respondents were split between seven different types of employment positions. Participants ages ranged from 26 to 80 years, and the average age was 51 (Figure 4-1). Worthy of note is the relative affluence of the survey sample; that most participants had high incomes, were well-educated and healthy, suggests that they may not have had a personal connection to many of the core issues presented in the survey (i.e., the SDOH and health inequities).

Table 4-2: Socio-demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	219	64.4
	Female	121	35.6
Education	High school diploma or less	8	2.3
	Some post-secondary	40	11.7
	Community college diploma	20	5.8
	Technical/vocational school diploma	33	9.6
	Undergraduate degree	86	25.1
	Graduate degree	87	25.4
	Professional degree	67	19.6
	Other	1	0.3
Household Income	Less than $40,000	2	0.6
	$40,000 to $49,999	2	0.6
	$50,000 to $59,999	2	0.6
	$60,000 to $69,999	6	1.8
	$70,000 to $79,999	8	2.4
	$80,000 to $89,999	20	6.0
	$90,000 to $99,999	24	7.3
	$100,000 and over	267	80.7
Self-Reported Health	Excellent	105	31.1
	Very good	162	47.9
	Good	63	18.6
	Fair	8	2.4
Position	Councillor/Mayor	64	18.7
	City Manager	7	2.0
	Department Director or GM	65	19.0
	Departmental Deputy Directors/Chiefs	36	10.5
	Unit Manager	105	30.6
	Program Manager	16	4.7
	City clerk	10	2.9
	Fire chief	12	3.5
	OIC or Police Chief	12	3.5
	Library Director	6	1.7
	Other (e.g., solicitors, officers, planners)	10	2.9

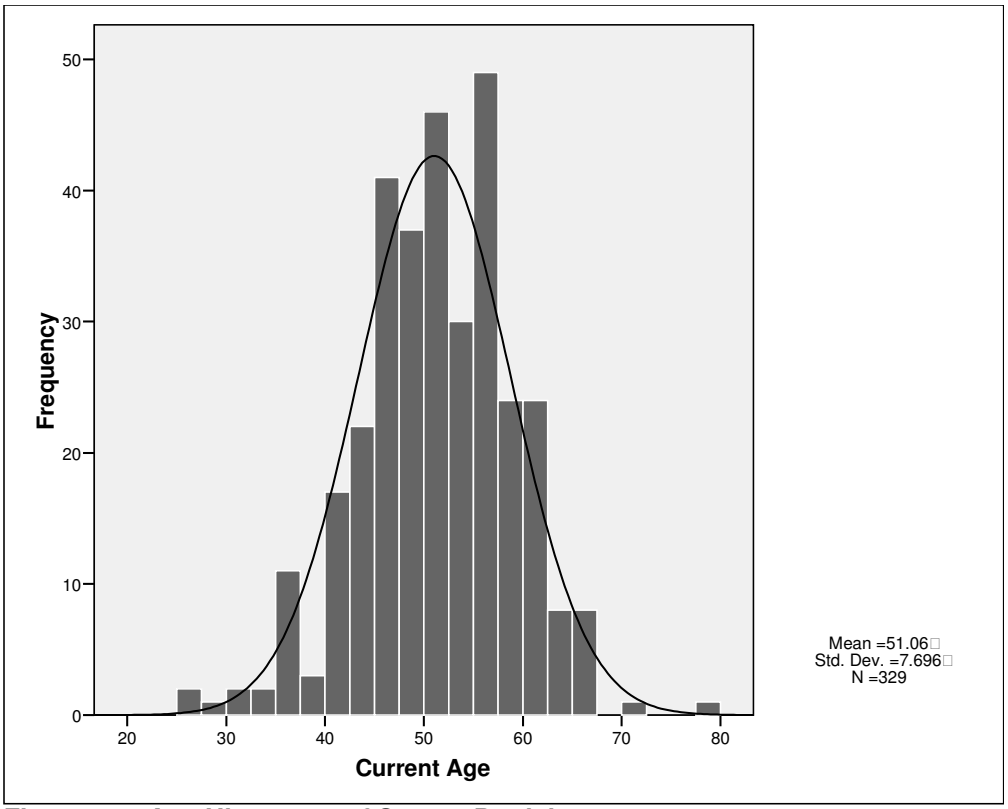


Figure 4-1: Age Histogram of Survey Participants

4-3 PURPOSE #1 – ASSESSING PARTICIPANTS' UNDERSTANDING OF THE SDOH

Participants were asked to indicate which neighbourhoods in their municipality were the healthiest and least healthy. Despite diverse responses for both questions by municipality, consensus (or near consensus) was achieved in a number of cases (Table 4-3). For the healthiest neighbourhoods, there was a consensus in three municipalities (Port Coquitlam, Pitt Meadows, and Surrey), and near consensus in New Westminster (90%), Vancouver (95%), and White Rock (90%). Greater consensus was reached in identifying the least healthy neighbourhoods, with five municipalities (Burnaby, City of North Vancouver, Pitt Meadows, Surrey, Vancouver) with complete consensus, and near consensus in the City and Township of Langley (both 93%). These findings speak to the role of media in constructing realities and shaping perceptions of healthy and unhealthy places (Reutter, Veenstra et al. 2005; Collins, Hayes et al. 2009).

Because the number of respondents within each municipality varied considerably, the achievement of consensus across municipalities was not equally noteworthy. For example, consensus achieved among the N=45 Vancouver respondents was far more impressive than consensus achieved among the N=3 respondents from Pitt Meadows, in identifying the least healthy neighbourhood in their jurisdiction. Interestingly, neighbourhoods in some municipalities were identified as being the healthiest and least healthy (e.g., *Lower Lynn* in City of North Vancouver, *Ambleside* in District of West Vancouver).

Table 4-3: Summary of Healthiest and Least Healthy Neighbourhoods Identified by Participants by Municipality

Municipality	Healthiest	% Agreement	Least Healthy	% Agreement
Burnaby	Burnaby Heights/North Burnaby/Capitol Hill	5 (38.5)	Edmonds/Stride/High Gate	14 (100.0)
	Buckingham/Deer Lake	5 (38.5)		
	Government Road	2 (15.4)		
	Metrotown	1 (7.6)		
City of Langley	Uplands	9 (64.3)	Douglas/Downtown	14 (93.3)
	Alice Brown/Brookswood	3 (21.4)	Uplands	1 (6.7)
	Blacklock/South Langley City	2 (14.3)		
City of North Vancouver	Central & Upper Lonsdale, Grand Blvd	12 (80.0)	Lower Lonsdale/First Nations Reserve	18 (100.0)
	Lower Lonsdale	1 (6.7)		
	Cedar Village	1 (6.7)		
	Temple Heights	1 (6.7)		
Coquitlam	Westwood Plateau	4 (33.3)	Maillardville	8 (61.5)
	Town Centre	3 (25.0)	Burquitlam/Cottonwood/North Road/Maillardville	5 (38.5)
	Ranch Park	2 (16.7)		
	Mundy Park, Harbour Chines, Poirer Area	2 (16.7)		
	Westwood Plateau & Poirer Area	1 (8.3)		
Delta	Tsawwassen/Boundary Bay/South Delta	8 (80.0)	North Delta/Townline Node	8 (88.9)
	Ladner	2 (20.0)	Tsawwassen	1 (11.1)
District of North Vancouver	Seymour/Blueridge/Deep Cove	6 (37.5)	Lower Lynn/Lynnmour/Maplewood	15 (88.2)
	Upper Capilano/Delbrook/Highlands/Grouse Woods	6 (37.5)	Lower Capilano	2 (11.8)
	Lynn Valley	2 (12.5)		
	Pemberton Heights	1 (6.3)		
	Edgemont Village & Seymour areas	1 (6.3)		

Municipality	Healthiest	% Agreement	Least Healthy	% Agreement
Maple Ridge	Silver Valley/Rockridge	7 (43.8)	Downtown Core/Haney	10 (55.6)
	Cottonwood/Albion/Kanaka Ridge/East Maple Ridge	6 (37.5)	Port Haney/Lower Haney	5 (27.8)
	Downtown	1 (6.3)	Hammond	3 (16.7)
	Academy Park	1 (6.3)		
	Whonnock	1 (6.3)		
New Westminster	Queen's Park/Uptown	9 (90.0)	Brow of the Hill	8 (80.0)
	Massey Heights	1 (10.0)	Downtown	2 (20.0)
Port Coquitlam	Citadel Heights/Maryhill	9 (100.0)	North Side/Hastings	5 (55.6)
			Central/Downtown	4 (44.4)
Pitt Meadows	Sawyers Landing	1 (100.0)	Harris Road/Katzie Indian Reserve	3 (100.0)
Port Moody	Heritage Woods	2 (50.0)	Creekside	1 (33.3)
	Newport	1 (25.0)	Seaview	1 (33.3)
	North Shore	1 (25.0)	Moody Center	1 (33.3)
Richmond	Steveston	18 (56.3)	East Richmond	13 (38.2)
	Terra Nova/Thompson	8 (25.0)	Richmond Center	7 (20.6)
	West Richmond	6 (18.7)	Shellmont/Broadmoor	6 (17.6)
			Bridgeport/Burkeville	4 (11.8)
			Hamilton	4 (11.8)
Surrey	South Surrey/Ocean Park/Semiahmoo	16 (100.0)	North/Central Surrey/Whalley/Bridgeview	16 (100.0)
Township of Langley	Walnut Grove/Fort Langley	10 (83.3)	Aldergrove	14 (93.3)
	Murrayville	2 (16.7)	Brookswood	1 (6.7)

Municipality	Healthiest	% Agreement	Least Healthy	% Agreement
Vancouver	West Point Grey/Kitsilano/Kerrisdale/Dunbar/Shaughnesy Yaletown West End	39 (95.1) 1 (2.5) 1 (2.5)	Downtown East Side/Strathcona	45 (100.0)
White Rock	Westside Upper East Side	4 (90.0) 1 (10.0)	Town Center Uptown Eastside	2 (66.7) 1 (33.3)
West Vancouver	Caulfield/Upper Caulfield/Cypress Park/British Properties Ambleside/Dundarave Gleneagles/Eagle Ridge Caulfield/Whitby	8 (61.5) 2 (15.4) 2 (15.4) 1 (7.7)	Ambleside Squamish Nation Reserve Horseshoe Bay	12 (75.0) 2 (12.5) 2 (12.5)

The next section of the survey dealt with participants' understanding of and attitudes towards the social determinants of health (SDOH).[33] Participants rated the level of influence each SDOH has on the health of local residents, and the level of priority that should be assigned to addressing each SDOH (Figure 4-2). 'Maintaining a healthy lifestyle', 'clear air & water', and 'early childhood development' were considered the most influential determinants of health, as well as the highest priorities for action. Thus, while participants placed high priority on behavioural explanations for health inequities, their responses also reflect concern about local and regional issues, and potentially, their awareness of research activities by the Vancouver-based Human Early Learning Partnership (Kershaw, Irwin et al. 2006). Meanwhile, the low priority assigned to 'income' suggests resistance among some participants to income redistribution policies.

In terms of correspondence with each other, three SDOH ('strong sense of community', 'clean air & water', and 'hospitals & healthcare professionals') were assigned significantly higher levels of priority for action than influence, while four SDOH ('income', 'helpful family & friends', 'jobs & working conditions', and 'maintaining a healthy lifestyle') were assigned significantly higher levels of influence than priority for action. If understanding determined attitudes towards the SDOH, then one would expect greater congruence between these two constructs.

[33] Tests for significant differences were run to assess whether perceived level of influence and priority for action for the SDOH varied by personal income levels. No significant differences for any of the SDOH, in terms of influence and priority for action, were observed across all 8 income groupings, and when the sample was split into two groups (participants with incomes less than, and those with incomes greater than $100,000). These findings suggest that annual household income did not influence participants' views concerning the SDOH.

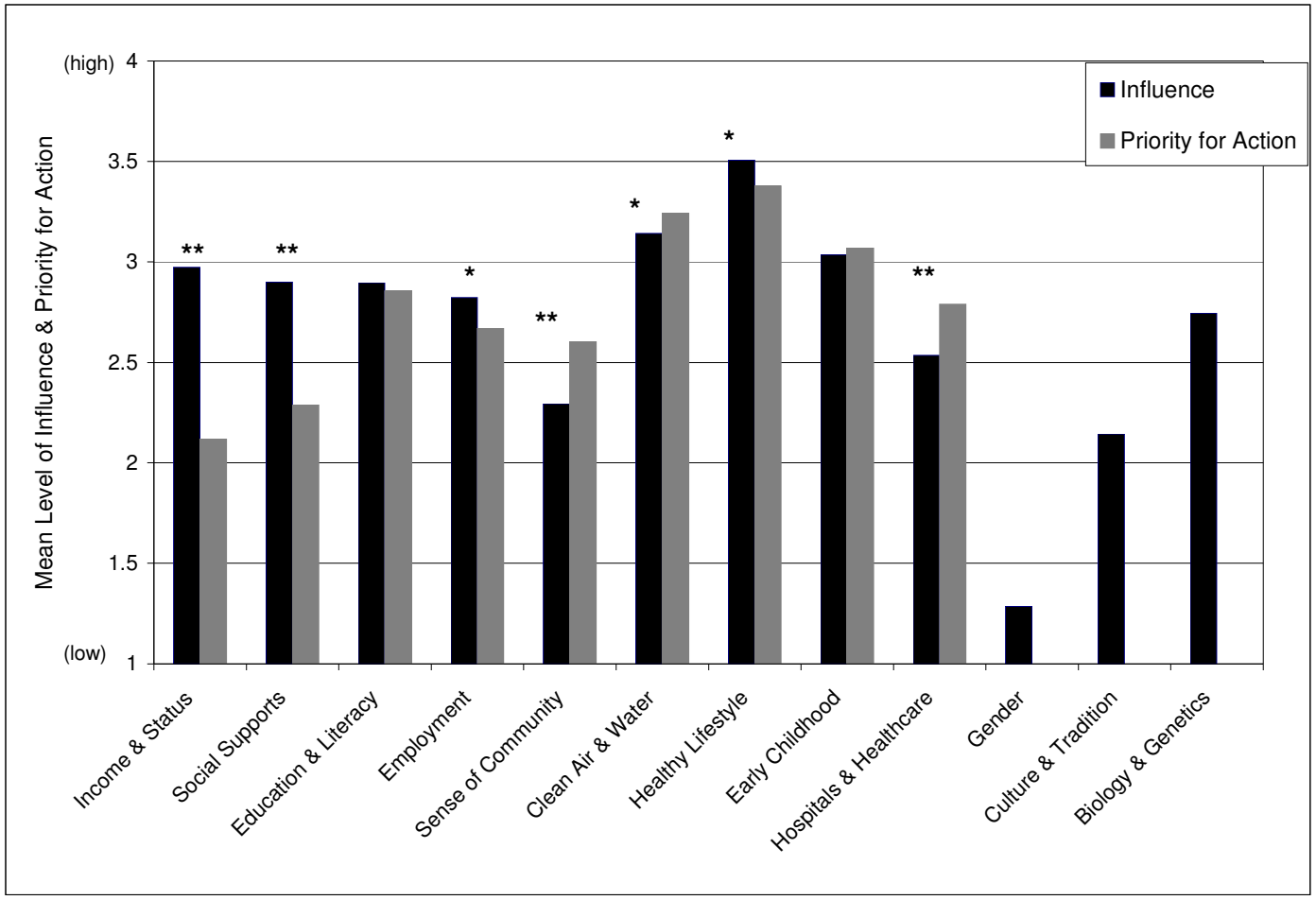


Figure 4-2: Mean Level of Influence and Priority for Action for Each SDOH, and Level of Correspondence with Each Other

**Significantly different at the 99.9% level of confidence; *Significantly different at the 99% level of confidence.

Participants were also asked to identify which SDOH warrants the highest overall priority for action, and which SDOH municipalities are best and least able to address. The results for these three questions, as well as the mean level of priority for action for all SDOH (secondary axis), are displayed in Figure 4-3. Over one-third (36%) of participants considered 'maintaining a healthy lifestyle' to be the most important determinant to address overall, followed by 'healthy childhood development' (16%) and 'clean air & water' (13%). These findings generally correspond to the participants' understanding of, and attitudes towards, the SDOH, as reported above.

Nearly half (48%) of participants felt that municipalities were best able to address the 'strong sense of community' determinant, followed by 'clean air & water' (23%) and 'maintaining a healthy lifestyle' (22%). 'Hospitals & healthcare professionals' (38%) and 'income & social status' (36%) were most commonly identified as the determinant municipalities were worst positioned to address. These findings suggest that geographical proximity, intervention scope (i.e., individually-targeted versus population-wide), and jurisdictional powers shape municipal actors' perceptions of the domains of municipal governments' influence on health inequities.

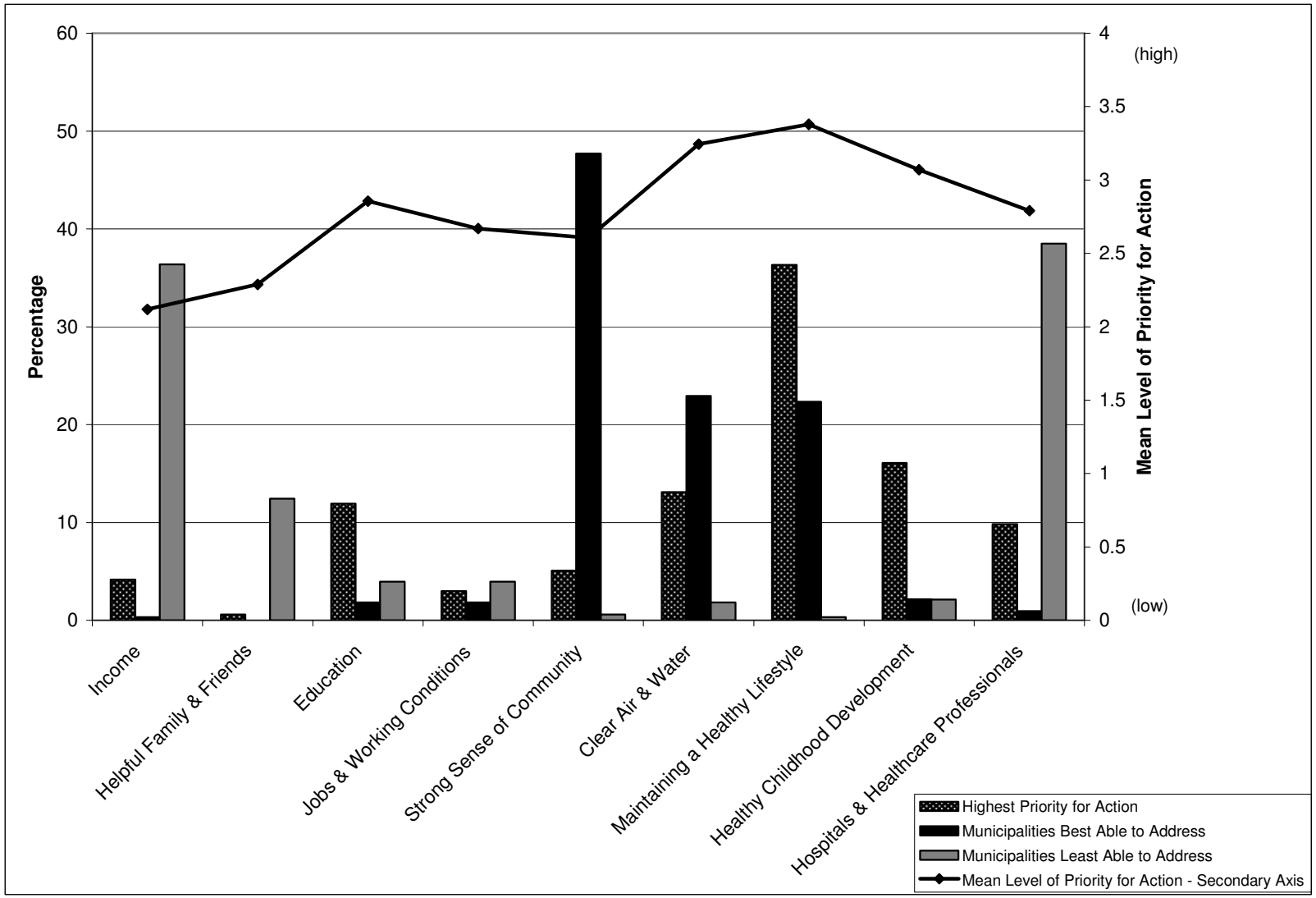


Figure 4-3: Highest Overall Priority, Best and Least Able for Municipalities to Address, and Mean Level of Priority for Action for SDOH

Participants were asked to identify which individual, organization or institution was most responsible for addressing their highest priority determinant (Table 4-4). Provincial governments (21%) and individual citizens (21%) were the most commonly identified entities overall. Provincial governments were popular targets for addressing 'income' (35%), 'education & literacy' (40%), and 'hospitals & healthcare professionals' (56%). Municipalities were often viewed as responsible for 'strong sense of community' (33%), regional governments for 'clean air & water' (32%), individuals/citizens for 'maintaining a healthy lifestyle' (50%), private sector and employers for 'jobs & working conditions' (43%), and parents and/or families for 'healthy childhood development' (32%). Thus, participants generally felt that responsibility for addressing specific determinants corresponded with the sector or entity that bore (or was perceived to bear) the greatest influence or jurisdictional authority for those determinants.

Table 4-4: Correlations between SDOH Deemed Highest Priority for Action and Entity Responsible for Action

Individual, Organization or Body considered Responsible	Income	Helpful family and friends	Education	Jobs and working conditions	Strong sense of community	Clean air and water	Maintaining a healthy lifestyle	Having a healthy childhood	Hospitals and healthcare professionals	Total
All levels of government	**3 (15.0)**	**0**	**5 (8.8)**	**2 (14.3)**	**2 (8.3)**	**5 (9.1)**	**7 (4.1)**	**11 (12.0)**	**5 (12.2)**	**41 (8.4)**
Federal government	**5 (25.0)**	**0**	**5 (8.8)**	**1 (7.1)**	**0**	**5 (7.6)**	**5 (2.9)**	**6 (6.5)**	**9 (22.0)**	**36 (7.4)**
Provincial governments	**7 (35.0)**	**0**	**23 (40.4)**	**2 (14.3)**	**1 (4.2)**	**15 (22.7)**	**18 (10.4)**	**14 (15.2)**	**23 (56.1)**	**103 (21.1)**
Municipal government	**1 (5.0)**	**0**	**3 (5.3)**	**2 (14.3)**	**8 (33.3)**	**15 (22.7)**	**18 (10.4)**	**7 (7.6)**	**0**	**54 (11.0)**
Regional governments	**0**	**0**	**0**	**0**	**1 (4.2)**	**21 (31.8)**	**0**	**0**	**0**	**22 (4.5)**
Individuals/Citizens	**2 (10.0)**	**1 (50.0)**	**3 (5.3)**	**1 (7.1)**	**3 (12.5)**	**4 (6.1)**	**86 (49.7)**	**2 (2.2)**	**1 (2.4)**	**103 (21.1)**
Community organizations	**0**	**0**	**1 (1.8)**	**0**	**6 (25.0)**	**0**	**3 (1.7)**	**3 (3.3)**	**0**	**13 (2.7)**
Private sector, employers	**2 (10.0)**	**0**	**1 (1.8)**	**6 (42.9)**	**1 (4.2)**	**0**	**2 (1.2)**	**0**	**0**	**12 (2.5)**
School system	**0**	**0**	**11 (19.3)**	**0**	**0**	**0**	**13 (7.5)**	**11 (12.0)**	**0**	**35 (7.2)**
Broader community	**0**	**0**	**3 (5.3)**	**0**	**2 (8.3)**	**0**	**4 (2.3)**	**6 (6.5)**	**0**	**15 (3.1)**
Healthcare system	**0**	**0**	**1 (1.8)**	**0**	**0**	**0**	**7 (4.1)**	**3 (3.3)**	**3 (7.3)**	**14 (2.9)**
Parents and/or	**0**	**1 (50.0)**	**1 (1.8)**	**0**	**0**	**0**	**10 (5.8)**	**29 (31.5)**	**0**	**31 (8.4)**

families										
Total	**20 (100.0)**	**2 (100.0)**	**57 (100.0)**	**14 (100.0)**	**24 (100.0)**	**66 (100.0)**	**173 (100.0)**	**92 (100.0)**	**41 (100.0)**	**489 (100.0)**

4-4 PURPOSE #2 – ASSESSING PARTICIPANTS' VIEWS CONCERNING THE ROLES OF MUNICIPALITIES IN GENERAL

The next section of the survey assessed participants' views on the role municipalities could play in addressing health disparities in general. The first set of questions asked participants to rate the level of responsibility and influence they considered each major sector of society to hold in terms of addressing health disparities (Figure 4-4). For every sector, the mean level of influence was perceived to be greater than mean level of responsibility for participants. With the exception of the differences between responsibility and influence of individuals ($p=0.211$), each of the within-sector differences were extremely significant ($p<0.001$) and in the same relative direction.

Overall, the federal government, provincial governments, and regional health authorities were assigned the highest mean levels of responsibility and influence for addressing health disparities, suggesting that participants consider all levels of governments, except for municipalities, to be the most important institutions in addressing disparities. These findings also suggest that participants took the survey as an opportunity to express their concerns about offloading of responsibilities from senior governments onto municipalities. Interestingly, the market was viewed as bearing the least responsibility and influence. These findings are surprising considering the important roles played by developers, financiers, and other private institutions in municipal governance in Canada (Hodge 1998).

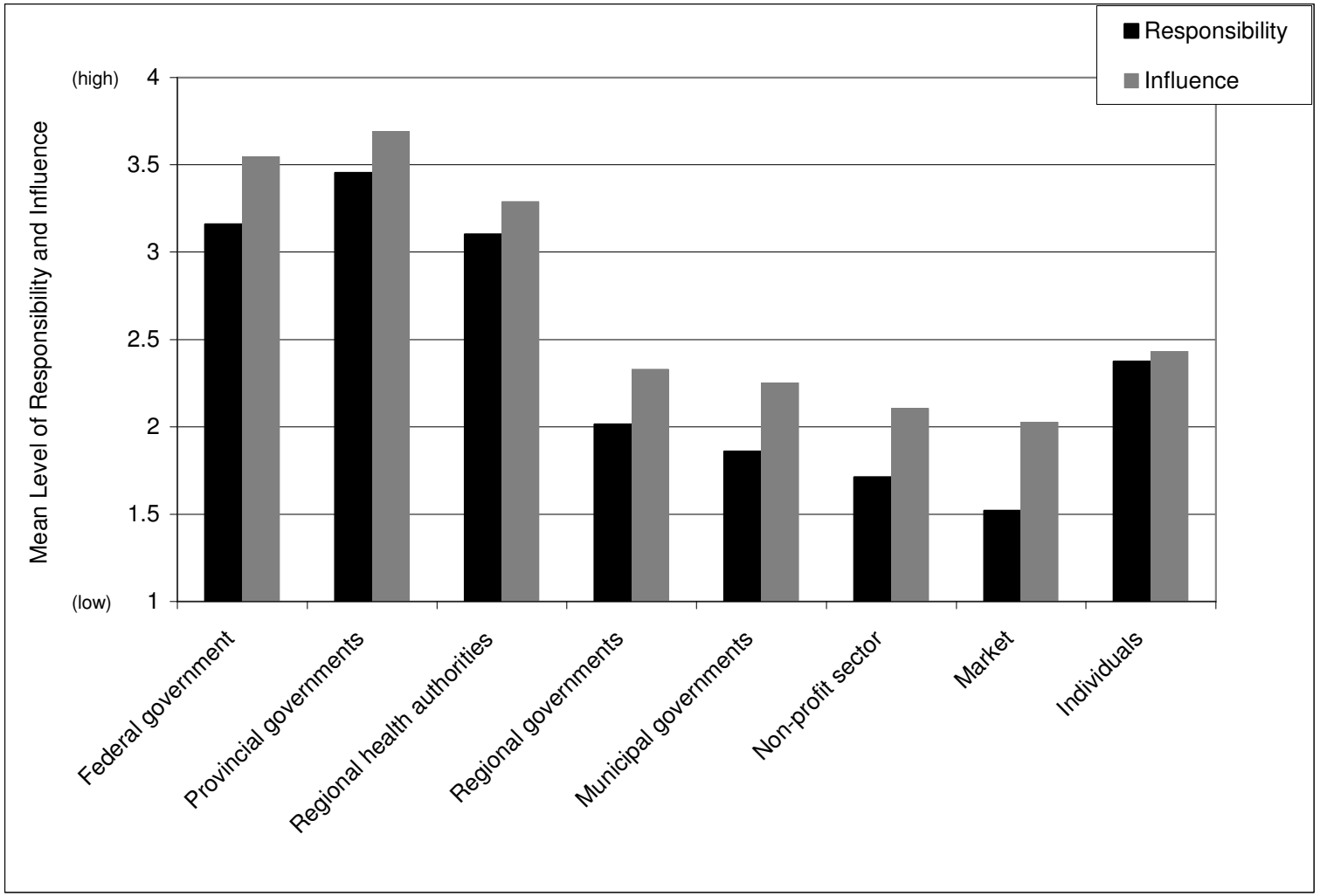


Figure 4-4: Mean Level of Responsibility and Influence of Major Sectors of Society for Addressing Health Disparities

Participants were then asked to rate the level of priority for various municipal policy levers and level of constraint posed by various policy barriers on addressing local health disparities (Figure 4-5 and Figure 4-6). The levers of 'parks & recreation', 'community centers', and 'citizen engagement' were considered the highest priorities, while 'property taxes', 'bylaw enforcement', and 'relations with businesses' were considered the lowest priorities. These priority assignments illustrate a tendency among municipal actors to pursue the most politically palatable, and avoid the most unpalatable, policy or program options.

In terms of policy barriers, participants felt most constrained by 'insufficient provincial funding' and 'insufficient federal funding', and least constrained by 'excessive out-migration' and 'excessive in-migration'. The high level of perceived constraint by insufficient funding lends support to the inferences made earlier about actors' concerns of senior government offloading. It is unclear why actors' did not feel out- and in-migration to be constraining forces; it may be that out- and in-migration are not overly disruptive to the municipalities' tax bases, and/or that participants did not fully understand what these terms meant.

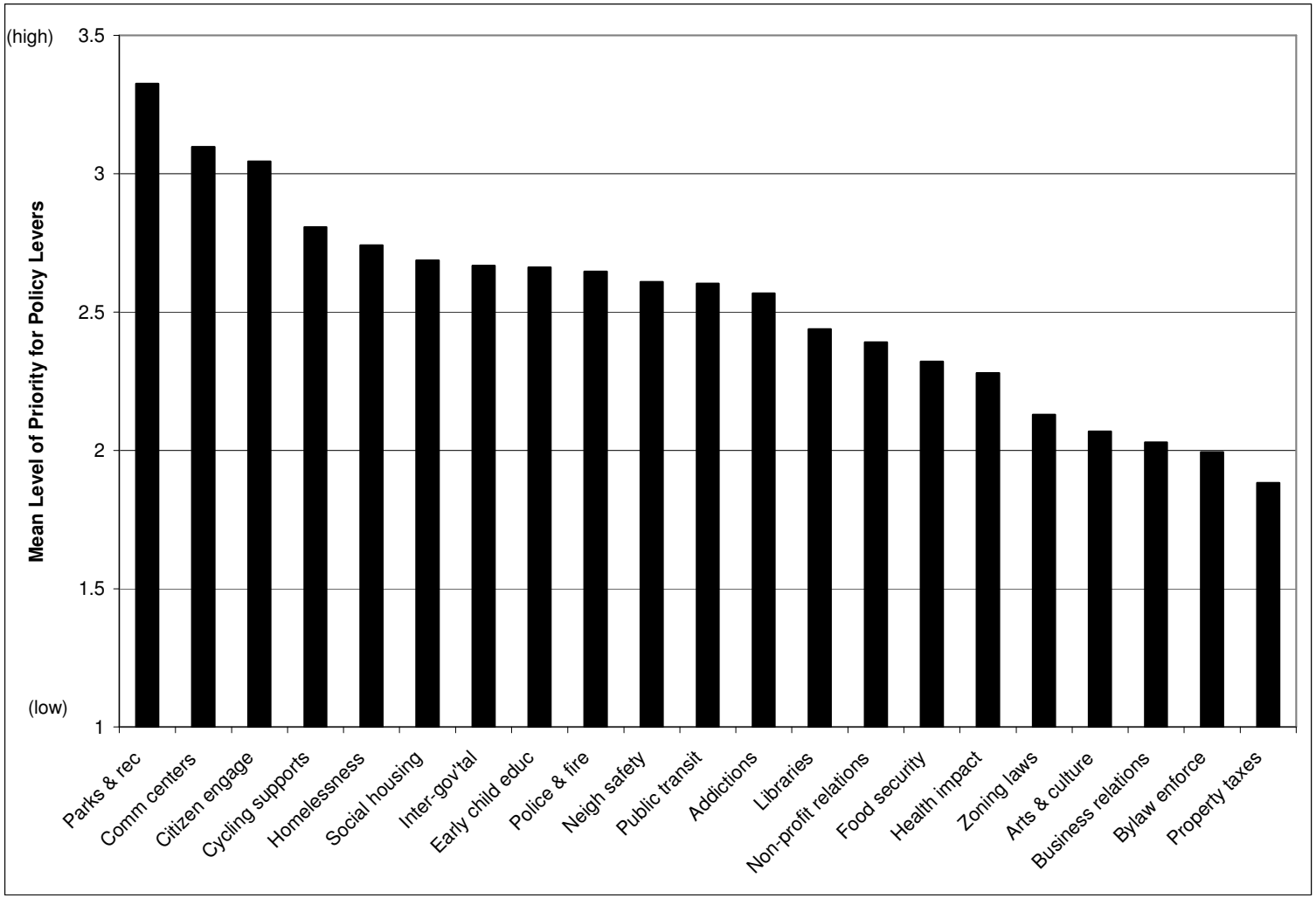


Figure 4-5: Mean Level of Priority for Various Policy Levers for Addressing Health Disparities

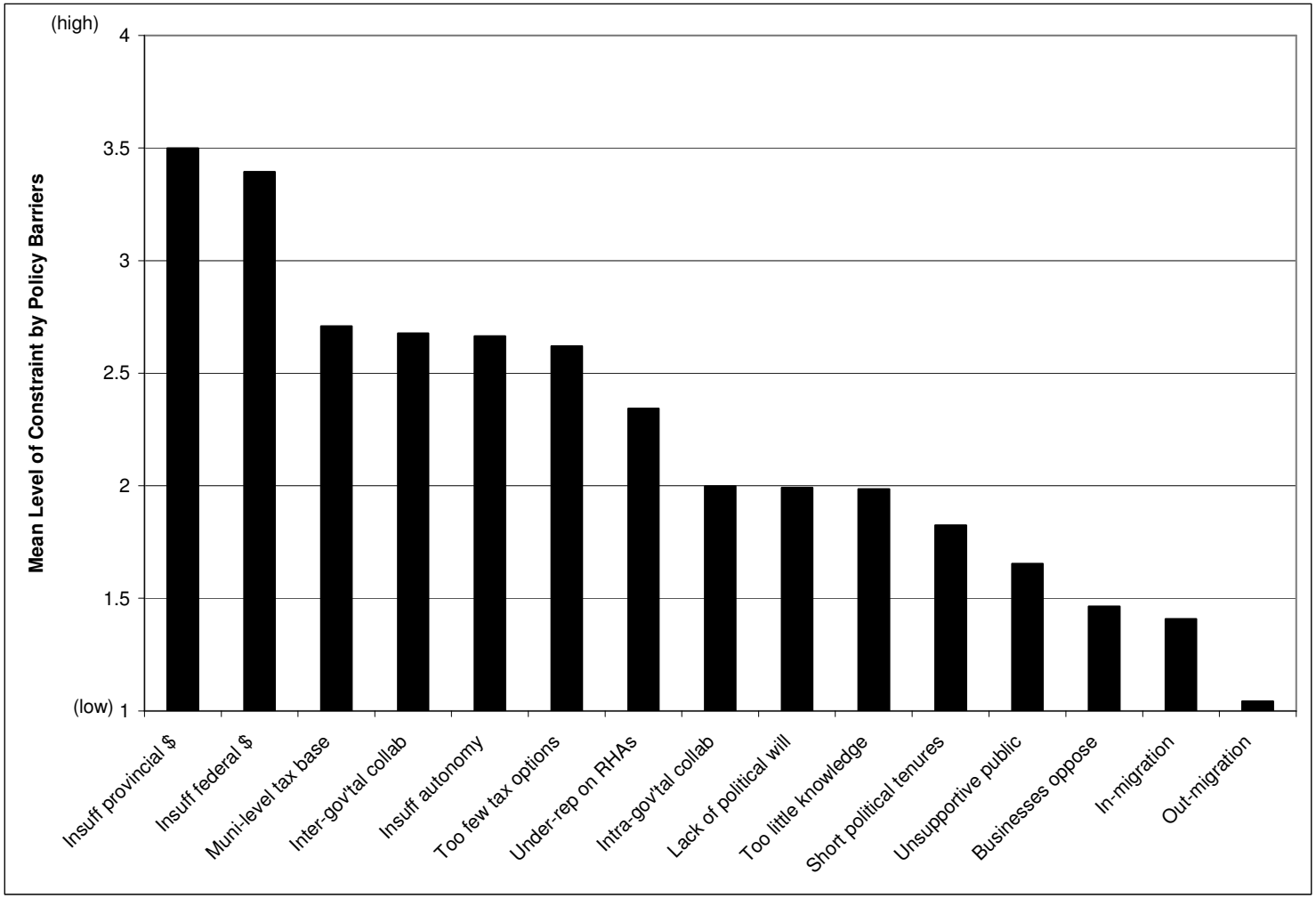


Figure 4-6: Mean Level of Constraints Posed by Various Policy Barriers to Addressing Health Disparities

Bivariate analyses were performed on participants' perceptions of policy levers (Table 4-5) and perceptions of policy barriers (Table 4-6). In both analyses, all statistically significant correlations were positive, and several correlations in both analyses were very strong (>0.600). In terms of policy levers, influence of 'libraries' was strongly associated with 'arts & culture programs' (0.601), 'parks & recreation programs' with 'community centers' (0.735), 'social housing' with 'homelessness programs' (0.730), 'homelessness programs' with 'addiction programs' (0.635), 'zoning laws' with 'bylaw enforcement' (0.628), and 'relations with businesses' with 'relations with non-profits' (0.657). As for policy constraints, two associations were very strong: 'insufficient federal funding' with 'insufficient provincial funding' (0.776), and 'too few taxation options' with 'insufficient tax base' (0.672). Thus, participants' support for policy levers and concerns about constraints clustered around key themes, suggesting there may be some predictability in anticipating municipal government actors' attitudes towards potential areas of intervention on health disparities at the local level.

A cross-tabs analysis was also performed to investigate relationships between respondents' department of employment and their perceptions of priority for municipal policy levers (Table 4-7). *Parks and recreation facilities and programs* and *citizen engagement* were assigned high priority by 60% of respondents (or greater) in every municipal department, while *property taxes*, *zoning laws*, and *bylaw enforcement* were never assigned high priority by a majority of respondents across departments, suggesting that individualistically conceptualized solutions to health disparities are widely held by the municipal

actors surveyed here. Police departments appear most supportive of a multi-pronged approach to addressing health disparities (60% of respondents or higher assigned high priority to 10 of 21 levers), while engineering departments appear the least supportive of such an approach (only 4 of 21 levers were assigned high priority by 60% of respondents or higher).

Support for a few policy levers corresponded with respondents' department of employment: priority for *public libraries* was highest from respondents from libraries, priority for reducing *homelessness* and *addiction* and *protective services* was highest from respondents from police departments, and priority for *early childhood education* was highest from respondents from parks, recreation and community services departments. Meanwhile, a few unpredictable relationships also emerged: priority for *public transit* was highest from respondents from police departments, priority for *cycling infrastructure* was highest from city manager's offices, and priority for *conducting health impact assessments* was highest from fire departments. Finally, over 60% of respondents in planning and development departments assigned high priority to relations with the non-profit sector, while inter-governmental relations was assigned high priority by over 60% of respondents in four departments – city manager's office, parks, recreation and community services, fire and rescue, and libraries. These latter findings may reflect the types of inter-institutional relationships that often take place between municipal government departments, the non-profit sector, and other governmental bodies.

Table 4-5: Bivariate Analysis of Priority for Policy Levers

	Public libraries	Arts and culture	Parks and recreation	Community centers	Neighbourhood safety	Social housing	Homelessness	Food security	Addiction prevention	Early childhood education	Public transportation	Cycling infrastructure	Property taxes	Zoning laws	Bylaw enforcement	Police fire protection	Health impact assessments	Inter-governmental relations	Relations with businesses	Relations with non-profits
Arts	.601																			
Parks	.428	.382																		
Comm Center	.378	.394	.735																	
Neigh safety	.399	.305	.341	.442																
Housing	.236	.262	ns	.302	.369															
Home-less	.171	ns	ns	.229	.311	.730														
Food	.156	ns	.142	.233	.258	.539	.561													
Addic	ns	ns	ns	ns	.240	.538	.635	.580												
ECE	.271	.243	.302	.319	.211	.452	.434	.488	.541											
Transit	.203	.265	.247	.248	.244	.344	.265	.243	.298	.384										
Cycling	.205	.248	.415	.345	.164	ns	ns	ns	ns	.162	.472									
Taxes	.250	.264	ns	.163	.238	.206	.149	.286	ns	.167	.313	.216								
Zoning	.338	.297	ns	.176	.247	ns	ns	ns	ns	ns	.306	.314	.477							
Bylaws	.272	.175	ns	ns	.299	ns	ns	ns	ns	ns	.185	.158	.444	.628						
Protect	.168	ns	ns	ns	.386	ns	.159	.155	ns	ns	.198	ns	.323	.368	.549					
HIAs	.163	.171	.211	.237	.214	.339	.340	.451	.414	.442	.211	ns	.233	ns	ns	ns				
Inter-gov	.186	.182	ns	.164	.216	.295	.295	.305	.252	.304	.188	ns	.209	.187	.191	.168	.400			
Business	.250	.221	.230	.242	.323	.178	.206	.277	.242	.343	.259	.257	.357	.304	.296	.311	.451	.446		
Non-profs	.250	.360	.201	.283	.303	.268	.281	.258	.250	.294	.215	.240	.257	.210	.196	.190	.411	.429	.657	
Citizen	.238	.263	.352	.401	.301	.249	.309	.280	.256	.316	.279	.342	.230	.233	.147	ns	.415	.323	.413	.440

Table 4-6: Bivariate Analysis of Constraint by Policy Barriers

	Insufficient federal funding	Insufficient provincial funding	Insufficient political autonomy	Under-representation on RHA boards	Insufficient inter-gov collaboration	Insufficient collab within municipality	Insufficient knowledge within municipality	Too few taxation options	Insufficient municipal-level tax base	Opposition from private businesses	Short tenures for municipal politicians	Unsupportive public opinion	Lack of political will	Excessive residential in-migration
Insufficient provincial funding	.776													
Insufficient political autonomy	.280	.249												
Under-representation on RHAs	.257	.257	.467											
Insufficient inter-gov collaboration	.187	.239	.268	.459										
Insufficient collab w/n municipality	ns	.175	.221	.310	.528									
Insufficient knowledge w/n municipality	ns	ns	.196	.260	.355	.509								
Too few taxation options	.278	.273	.278	.246	.222	.212	.317							
Insufficient tax base	.239	.246	.224	.293	.207	.202	.262	.672						
Opposition from private businesses	ns	ns	ns	.226	.224	.268	.285	.168	ns					
Short political tenures	ns	ns	ns	.187	.201	.267	.270	.198	ns	.477				
Unsupportive public opinion	ns	ns	ns	.168	.192	.236	.297	ns	ns	.375	.393			
Lack of political will	ns	ns	ns	ns	.242	.251	.287	ns	ns	.354	.358	.502		
Excessive residential in-migration	ns	ns	ns	ns	ns	.210	.175	ns	ns	.318	.294	.233	.248	
Excessive residential out-migration	ns	ns	ns	ns	ns	.164	.231	ns	ns	.355	.272	.358	.284	.563

Table 4-7: Percentage of Respondents by Department Assigning High Influence to Various Municipal Policy Levers

	City Council (Total N=64)	City Manager's Office (Total N=21)	Corporate Services (Total N=87)	Engineering, Operations, Public Works (Total N= 33)	Parks, Recreation, Culture & Community Services (Total N=47)	Planning & Development (Total N=38)	Fire & Rescue (Total N=24)	Police (Total N=20)	Libraries (Total N=9)	Total (Total N=343)
Libraries	54.7	42.9	39.1	45.5	44.7	36.8	25.0	10.0	100.0	42.5
Arts	31.3	28.6	21.8	15.2	46.8	36.8	12.5	10.0	11.1	26.8
Parks	87.5	90.5	88.5	87.9	95.7	78.9	79.2	90.0	100.0	88.0
Comm Center	82.8	57.1	81.6	78.8	89.4	89.5	62.5	70.0	55.6	79.3
Neigh safety	56.3	47.6	59.8	24.2	61.7	57.9	33.3	40.0	55.6	51.9
Housing	53.1	28.6	49.4	39.4	70.2	73.7	54.2	70.0	44.4	54.8
Homeless	57.8	42.9	54.0	48.5	70.2	68.4	41.7	80.0	66.7	58.3
Food	43.8	28.6	37.9	36.4	51.1	39.5	54.2	50.0	33.3	42.0
Addict	60.9	47.6	42.5	39.4	57.4	55.3	50.0	85.0	55.6	52.8
ECE	54.7	57.1	46.0	39.4	78.7	50.0	50.0	70.0	66.7	54.8
Transit	60.9	52.4	49.4	54.5	59.6	57.9	41.7	70.0	55.6	55.4
Cycling	59.4	81.0	59.8	78.8	78.7	63.2	54.2	60.0	55.6	65.3
Taxes	25.0	28.6	16.1	9.1	29.8	21.1	20.8	35.0	11.1	21.6
Zoning	34.4	33.3	33.3	27.3	25.5	36.8	20.8	35.0	11.1	30.9
Bylaws	26.6	28.6	31.0	24.2	23.4	28.9	16.7	50.0	11.1	27.7
Protect	57.8	61.9	49.4	48.5	44.7	52.6	58.3	80.0	66.7	54.2

	City Council (Total N=64)	City Manager's Office (Total N=21)	Corporate Services (Total N=87)	Engineering, Operations, Public Works (Total N= 33)	Parks, Recreation, Culture & Community Services (Total N=47)	Planning & Development (Total N=38)	Fire & Rescue (Total N=24)	Police (Total N=20)	Libraries (Total N=9)	Total (Total N=343)
HIAs	32.8	28.6	34.5	39.4	55.3	26.3	62.5	40.0	11.1	37.9
Inter-gov	48.4	61.9	56.3	51.5	63.8	57.9	62.5	45.0	66.7	56.0
Business	23.4	28.6	27.6	21.2	34.0	31.6	37.5	40.0	22.2	28.9
Non-profs	45.3	42.9	46.0	30.3	59.6	60.5	37.5	40.0	33.3	46.4
Citizens	73.4	61.9	65.5	78.8	91.5	71.1	70.8	75.0	77.8	73.5

4-5 PURPOSE #3 – INFORMATION ON EXISTING MUNICIPAL POLICIES AND PLANS

This section of the survey dealt with participants' perceptions of how much priority their municipality of employment assigned to addressing local health disparities (Table 4-8). Less than half (44%) felt their municipality assigned high or very high priority to addressing health disparities. Participants from Surrey, and high density municipalities were more likely to perceive their municipality as assigning high priority, while Port Moody participants and those from low density municipalities felt their municipality assigned low levels of priority to addressing health disparities. Higher density municipalities are likely to have populations with more heterogeneous socioeconomic profiles (and thus health disparities) than lower density municipalities, likely accounting for their association with assigning higher priority for health disparities. Municipal departments delivering parks, recreation, leisure, & community services were considered the most responsible (43%), followed by planning & development departments (38%), likely reflecting the departments most commonly associated with health and social well-being at the local level.

Table 4-8: Summary of Metro Vancouver Municipalities' Efforts to Address Local Health Disparities

Level of Priority for Addressing Health Disparities N (%)	Very high priority	21 (6.3)
	High priority	124 (37.2)
	Some priority	141 (42.3)
	Low priority	37 (11.1)
	Not a priority at all	10 (3.0)
	Total	333 (100.0)
Significant Differences in Level of Priority p-value, Highest/Lowest	Municipality	p<0.001, Surrey/Port Moody
	Density	p=0.012, high/low density
	Elected vs. Non-Elected	ns
	Position	ns
	Department	ns
Department Responsible for Addressing Health Disparities N (%)	City Council	6 (1.5)
	City Manager's Office	7 (1.7)
	Corporate Services	11 (2.7)
	Engineering & Operations	10 (2.4)
	Parks, Recreation & Community Services	180 (43.4)
	Planning & Development	159 (38.3)
	Fire & Rescue	1 (0.2)
	Police	8 (1.9)
	All Departments	5 (1.2)
	Boards, committees	16 (3.9)
	Health Authority, Local Health Units	11 (2.7)
	Regional Government	1 (0.2)
	Total	415 (100)

Participants identified a multitude of existing policies, plans and programs that address, explicitly or otherwise, health disparities in their jurisdictions (Table 4-9). Policies or programs that deal with affordable housing and homelessness issues were most commonly identified (15%), followed by fitness, parks, and recreation programs (12%). Subsidies for low income families to access fitness programs (8%) and community development, revitalization & zoning bylaw changes (8%) were also popular suggestions. The majority of policies, plans and programs that participants identified had explicit health goals (69%). Four, in particular, were especially likely to have explicit health goals: *citizen engagement* (80%), *community services & outreach programs* (85%), *Community Services Plans or Social Well Being Plans* (89%), and *crime & fire prevention & protection programs* (83%). Meanwhile, according to participants, only a minority (40%) of *food security programs* had explicit health goals.

These findings highlight a disconnect between respondents' perceptions regarding municipal responsibilities, in the abstract, and activities, in the specific. In abstract terms, participants generally perceived municipal governments to bear little responsibility for addressing health disparities. Yet, the large scope of policies and programs, most of which had explicit health goals, identified by participants suggests that municipal governments are poised and actively addressing health disparities in their jurisdictions.

Table 4-9: Policies, Plans or Programs that Address Health Disparities, Explicitly or Not

Policy, Plan or Program	All policies, plans or programs mentioned N (% of total policies, plans or programs)	Proportion of all policies, plans or programs mentioned, with improving health as explicit goal N (% within policy, plan or program)
affordable housing/homelessness programs	71 (14.8)	43 (62.3)
arts & cultural programs	9 (1.9)	6 (66.7)
basic services (sewerage, water, libraries)	10 (2.1)	5 (55.6)
citizen engagement	5 (1.0)	4 (80.0)
community development, revitalization, zoning	36 (7.5)	24 (66.7)
community services & outreach, w/ health focus	13 (2.7)	11 (84.6)
Community Services or Social Well Being Plan	18 (3.8)	16 (88.9)
crime & fire prevention, protection programs	6 (1.3)	5 (83.3)
drug policy, harm reduction programs	20 (4.2)	12 (63.2)
early child development, child care strategies	17 (3.5)	12 (75.0)
employee wellness program	4 (0.8)	3 (75.0)
fitness programs, parks & recreation programs	58 (12.1)	41 (71.9)
food security programs	6 (1.3)	2 (40.0)
grants for NGOs, non-profits	12 (2.5)	7 (63.6)
infrastructure for parks, recreation, bikeways, paths	30 (6.3)	23 (76.7)
inter-governmental collaborations, relations	13 (2.7)	9 (75.0)
local healthcare, rehab, health promotion facilities	9 (1.9)	5 (55.6)
low income subsidies for fitness access	38 (7.9)	29 (76.3)
Official Community, Corporate or Municipal Plan	18 (3.8)	12 (66.7)

Policy, Plan or Program	All policies, plans or programs mentioned N (% of total policies, plans or programs)	Proportion of all policies, plans or programs mentioned, with improving health as explicit goal N (% within policy, plan or program)
Parks, Recreation, Culture & Leisure Plan	14 (2.9)	8 (57.1)
public transit, transportation programs	5 (1.0)	3 (60.0)
relations with NGOs, private sector, committees	14 (2.9)	11 (78.6)
seniors programs	13 (2.7)	9 (69.2)
support for disabilities, injury prevention	7 (1.5)	4 (57.1)
sustainability, ecodensity, mixed land use	16 (3.3)	12 (75.0)
youth programs	18 (3.8)	11 (61.1)
Total	480 (100)	327 (69.4)

4-6 PURPOSE #4 – RELATIONSHIP BETWEEN ATTITUDES AND CAPACITIES FOR ACTION

The fourth purpose of the survey was to assess the relationship between participants' attitudes towards health disparities and municipal capacities for action on health disparities in Metro Vancouver. Bivariate analyses were performed to assess two relationships: 1) perceptions of SDOH influence with perceptions of sectoral influence in addressing health disparities (Table 4-10); and 2) perceptions of SDOH priority with perceptions of sectoral responsibility for addressing health disparities (Table 4-11).

In both analyses, all significant correlations were in a positive direction and all were relatively weak relationships (<0.300). Assigning high levels of influence to the federal and provincial governments was associated with high influence from 'education'; regional health authorities with 'hospitals & healthcare professionals'; and regional and municipal governments with 'gender' and 'culture & tradition'. Participants that perceived regional and municipal governments to bear high levels of responsibility for addressing health disparities also assigned high priority to addressing 'helpful family & friends', 'jobs & working conditions', and 'early childhood education', while high priority for 'hospitals & healthcare professionals' was correlated with high responsibility among federal governments and regional health authorities. The correlations observed here demonstrate that participants recognized and considered the different jurisdictional and constitutional influences and responsibilities of the various sectors, as predicated by the Canadian constitution.

Table 4-10: Bivariate Analysis of Influence of SDOH by Influence of Societal Sectors for Health Disparities

Sector	Influence of income	Influence of helpful family	Influence of education	Influence of jobs	Influence of strong community	Influence of clean air	Influence of lifestyle	Influence of childhood	Influence of biology	Influence of hospitals	Influence of gender	Influence of culture
Federal government	ns	ns	0.158**	ns	ns	ns	ns	ns	ns	ns	ns	ns
Provincial governments	ns	ns	0.211**	ns	ns	ns	ns	ns	ns	ns	ns	ns
Regional health authorities	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.163**	ns	ns
Regional governments	ns	ns	ns	0.186**	ns	ns	ns	ns	ns	ns	0.170**	0.144**
Municipal governments	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.148**	0.175**
Non-profits	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Market	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Individuals	ns	ns	ns	ns	ns	ns	ns	ns	ns	Ns	ns	ns

Table 4-11: Bivariate Analysis of Priority for Action for SDOH by Responsibility of Societal Sectors for Health Disparities

Sector	Priority for income	Priority for helpful family	Priority for education	Priority for jobs	Priority for strong community	Priority for clean air	Priority for lifestyle	Priority for childhood	Priority for hospitals
Federal government	ns	ns	ns	ns	ns	ns	ns	ns	0.178**
Provincial governments	ns	ns	ns	ns	ns	ns	ns	ns	ns
Regional health authorities	ns	ns	ns	ns	ns	ns	ns	ns	0.222**
Regional governments	ns	0.193**	ns	0.206**	0.146**	ns	ns	0.151**	ns
Municipal governments	ns	0.154**	ns	0.144**	ns	ns	ns	0.171**	ns
Non-profits	ns	ns	ns	ns	ns	ns	ns	0.160**	ns
Market	ns	ns	ns	ns	ns	ns	ns	ns	ns
Individuals	ns	ns	ns	ns	ns	ns	ns	ns	ns

Also of in-depth analytic interest was whether the level of priority a municipality assigns to addressing health disparities is predicted by the municipality itself, by municipal-level characteristics, by participants' understanding and attitudes towards the SDOH, and by participants' perceptions of the influence of policy levers and constraints posed by policy barriers. Before proceeding with the binary logistic regressions necessary to examine these relationships, factor analysis was performed on all the results from all multi-item survey questions to reduce the number of predictor variables (and thus the level of auto-correlation) for the regression models (Table 4-12). Four factors were extracted from the question on influence of SDOH (54% total variance), three from the question on priority for action on the SDOH (54% total variance), five policy levers (64% total variance), and four policy barriers (58% total variance).

Two sets of two regression models were run (Table 4-13 and Table 4-14): one set (full model and backward step reduced model) that examined the independent effect of the municipality plus individual-level predictors, and another set (full model and backward step reduced model) that examined the independent effect of municipal-level variables plus individual-level predictors. In the first set of models, Surrey was used as the reference municipality as it had the highest mean level of priority for addressing health disparities (Table 4-13). In comparison to Surrey, nine of the sixteen remaining municipalities were significantly less likely to assign high priority to addressing local health disparities. Meanwhile, participants that assigned high levels of influence to *relations with businesses*, *bylaw enforcement*, and *strong sense of community*

were also significantly more likely to perceive their municipality to assign high priority to addressing health disparities. These findings suggest that municipalities with the greatest desire to tackle health disparities perceive health to be shaped by forces beyond the individual level (i.e., sense of community), and that reducing health disparities requires the cooperation and support of the local business community. The fact that bylaw enforcement was one of the least popular policy levers for action (Figure 4-5) suggests that its association with assigning priority for health disparities may be a statistical artefact.

In the second set of models, municipalities with a moderate to high share of park land and a moderate residential tax rate were less likely to assign high priority to addressing health disparities, while trends in the individual-level predictors remained the same (Table 4-14). Moderate to high availability of park land may be indicative of redistributive priorities in the municipality, directly through increased access to parks and recreation facilities, and indirectly as a proxy for similarly redistributive priorities. Thus, for respondents within municipalities with moderate to high proportions of park land, health disparities within their jurisdictions may be perceived as either modest in scope or sufficiently addressed through existing policies and programs. Because only three municipalities fell into the moderate residential tax rate category (i.e., Coquitlam, District of North Vancouver, and Township of Langley) (see Table 2-1), it is possible that this trend also represents a statistical artefact.

Table 4-12: Factor Analysis of Multi-Item Survey Questions for Data Reduction

Survey Question	Variable	Eigenvalue	Cumulative % of Variance
Influence of SDOH	Biology	1.819	15.161
	Income	1.643	28.852
	Strong sense of community	1.593	42.124
	Gender	1.447	54.182
Priority for Addressing SDOH	Clean air & water	1.867	20.740
	Jobs & working conditions	1.659	39.172
	Strong sense of community	1.354	54.214
Priority for Policy Levers	Addiction prevention	3.506	16.695
	Community centers	2.953	30.758
	Relations with businesses	2.820	44.186
	Bylaw enforcement	2.604	56.585
	Cycling infrastructure	1.579	64.101
Constraints on Addressing Health Disparities	Short tenures for municipal politicians	2.732	18.212
	Insufficient collaboration within municipal government	2.256	33.255
	Insufficient federal funding	2.075	47.091
	Too few taxation option	1.668	58.209

Table 4-13: Regression for Likelihood of Assigning High Priority to Addressing Health Disparities by Municipality

Variables (reference category)	Categories	Full Model		Reduced Model	
		OR (95% CI)	p-value	OR (95% CI)	p-value
Municipality (Surrey)	**City of Langley**	**0.271 (0.060, 1.232)**	**0.091**	**0.153 (0.031, 0.760)**	**0.022**
	City of North Vancouver	**0.244 (0.057, 1.047)**	**0.058**	**0.137 (0.029, 0.649)**	**0.012**
	Coquitlam	**0.430 (0.104, 1.771)**	**0.242**	**0.242 (0.053, 1.097)**	**0.066**
	Delta	**1.032 (0.238, 4.473)**	**0.967**	**0.581 (0.123, 2.737)**	**0.492**
	District of North Vancouver	**0.335 (0.082, 1.369)**	**0.128**	**0.189 (0.042, 0.850)**	**0.030**
	Maple Ridge	**0.336 (0.089, 1.273)**	**0.109**	**0.189 (0.045, 0.793)**	**0.023**
	New Westminster	**3.147 (0.477, 20.754)**	**0.233**	**1.772 (0.252, 12.466)**	**0.565**
	Port Coquitlam	**0.032 (0.003, 0.343)**	**0.004**	**0.018 (0.002, 0.206)**	**0.001**
	Pitt Meadows	**0.045 (0.004, 0.530)**	**0.014**	**0.025 (0.002, 0.318)**	**0.004**
	Port Moody	**0.247 (0.021, 2.827)**	**0.261**	**0.139 (0.011, 1.681)**	**0.121**
	Richmond	**0.417 (0.125, 1.389)**	**0.154**	**0.235 (0.063, 0.879)**	**0.032**
	Burnaby	**1.776 (0.401, 7.863)**	**0.449**	**0.563 (0.127, 2.493)**	**0.449**
	Township of Langley	**0.147 (0.029, 0.759)**	**0.022**	**0.083 (0.015, 0.465)**	**0.005**
	Vancouver	**0.778 (0.235, 2.574)**	**0.681**	**0.438 (0.119, 1.613)**	**0.215**
	West Vancouver	**0.369 (0.048, 2.812)**	**0.336**	**0.208 (0.025, 1.694)**	**0.142**
	White Rock	**0.328 (0.074, 1.461)**	**0.144**	**0.185 (0.038, 0.904)**	**0.037**
Policy Levers	**Addiction prevention**	**1.150 (0.651, 2.032)**	**0.629**		
	Community centers	**1.666 (0.736, 3.774)**	**0.221**		
	Relations w/ businesses	**2.587 (1.358, 4.930)**	**0.004**	**2.595 (1.425, 4.726)**	**0.002**
	Bylaw enforcement	**1.583 (0.846, 2.962)**	**0.151**	**1.815 (1.012, 3.254)**	**0.045**
	Cycling infrastructure	**1.153 (0.610, 2.178)**	**0.661**		

Variables (reference category)	Categories	Full Model		Reduced Model	
		OR (95% CI)	p-value	OR (95% CI)	p-value
Policy Constraints	**Federal funding**	**1.610 (0.744, 3.486)**	**0.227**		
	Collaboration w/n municipality	**0.966 (0.510, 1.832)**	**0.917**		
	Short tenures for politicians	**0.619 (0.315, 1.216)**	**0.164**		
	Too few taxation options	**1.079 (0.604, 1.930)**	**0.797**		
Influence of SDOH	**Income**	**1.239 (0.655, 2.346)**	**0.510**		
	Strong sense of community	**2.897 (1.517, 5.531)**	**0.001**	**2.932 (1.639, 5.244)**	**<0.001**
	Gender	**2.401 (0.615, 9.382)**	**0.208**		
	Biology	**1.187 (0.676, 2.082)**	**0.551**		
Priority for Addressing SDOH	**Jobs**	**1.515 (0.844, 2.719)**	**0.164**		
	Strong sense of community	**0.884 (0.454, 1.721)**	**0.717**		
	Clean air	**0.624 (0.294, 1.324)**	**0.219**		

Table 4-14: Regressions for Likelihood of Assigning High Priority to Addressing Health Disparities by Municipal-Level Characteristics

Variables (ref)	Categories	Full Model		Reduced Model	
		OR (95% CI)	p-value	OR (95% CI)	p-value
Population Density (2000 or more people/km2)	**1000-2000 people/km2**	**0.685 (0.332, 1.415)**	**0.307**		
	Under 1000 people/km2	**0.787 (0.326, 1.898)**	**0.593**		
Share of Park Land (Under 10%)	**10-20%**	**0.313 (0.132, 0.741)**	**0.008**	**0.323 (0.143, 0.728)**	**0.006**
	Over 20%	**0.414 (0.194, 0.880)**	**0.022**	**0.396 (0.197, 0.799)**	**0.010**
Residential Tax Rate (Under 2.5000)	**2.5000-3.5000**	**0.334 (0.143, 0.780)**	**0.011**	**0.309 (0.148, 0.644)**	**0.002**
	Over 3.5000	**0.672 (0.304, 1.483)**	**0.325**	**0.687 (0.332, 1.424)**	**0.313**
Policy Levers	**Addiction prevention**	**1.143 (0.675, 1.935)**	**0.620**		
	Community centers	**1.843 (0.850, 3.994)**	**0.122**	**1.878 (0.902, 3.913)**	**0.092**
	Relations w/ businesses	**2.292 (1.261, 4.167)**	**0.007**	**2.213 (1.259, 3.891)**	**0.006**
	Bylaw enforcement	**1.734 (0.965, 3.118)**	**0.066**	**1.778 (1.021, 3.096)**	**0.042**
	Cycling infrastructure	**1.193 (0.654, 2.174)**	**0.565**		
Policy Constraints	**Federal funding**	**1.579 (0.758, 3.291)**	**0.223**		
	Collaboration w/n municipality	**0.944 (0.514, 1.734)**	**0.853**		
	Short tenures for politicians	**0.824 (0.447, 1.520)**	**0.536**		
	Too few taxation options	**0.977 (0.565, 1.688)**	**0.933**		
Influence of SDOH	**Income**	**1.003 (0.554, 1.816)**	**0.991**		
	Strong sense of community	**2.202 (1.203, 4.029)**	**0.010**	**1.954 (1.155, 3.305)**	**0.013**
	Gender	**2.797 (0.731, 10.699)**	**0.133**		
	Biology	**1.090 (0.638, 1.862)**	**0.754**		

Variables (ref)	Categories	Full Model		Reduced Model	
		OR (95% CI)	p-value	OR (95% CI)	p-value
Priority for Addressing SDOH	**Jobs**	**1.588 (0.917, 2.748)**	**0.099**	**1.599 (0.949, 2.697)**	**0.078**
	Strong sense of community	**0.819 (0.442, 1.516)**	**0.525**		
	Clean air	**0.811 (0.410, 1.605)**	**0.548**		

CHAPTER 5: DOCUMENT ANALYSIS RESULTS

5-1 DISCUSSIONS OF HEALTH AND HEALTH-RELATED CONCEPTS

Discussions of health and related concepts totalled 100 passages across the five OCPs (Table 5-1). 'Health' and 'well-being' themes were mentioned roughly the same number of times (N=38 and N=37, respectively), while themes related to 'disease and illness' received the least overall attention (N = 25). The Richmond OCP mentioned 'health' most frequently, Surrey mentioned 'well-being' most frequently while the Vancouver OCP had the fewest references to health or related concepts. These findings likely reflect the greater attention paid to concepts of sustainability and livability in the OCPs, owing to the British Columbia government's mandate that municipal governments articulate a regional growth strategy that encompasses the principles of the Livable Region Strategy Plan (LRSP) (GVRD 1996; Government of BC 2008).

Thematic analyses revealed that 'health' passages focussed on creating healthy communities (either through addressing the SDOH or forming partnerships with the regional health board), and reducing hazardous exposures (Table 5-2). 'Well-being' passages were broader in scope, ranging from enhancing availability of services, reducing pollution, conserving energy, and increasing community pride, while passages on 'disease and illness' focused on providing accessible services and infrastructure, and special needs housing. No distinct differences across OCPs were observed for themes relating to health and related concepts.

Table 5-1: Frequency of Mentions of Health and Related Concepts

Code	Municipality					Total by Code
	Burnaby	New Westminster	Richmond	Surrey	Vancouver	
Health	10	9	14	5	0	38
Well-being	11	7	5	14	0	37
Disease or Illness	8	11	2	3	1	25
Total by Municipality	29	27	21	22	1	100

Table 5-2: Thematic Analyses of Health and Related Concept Passages

Code	Municipality				
	Burnaby	New Westminster	Richmond	Surrey	Vancouver
Health	-Connections b/n environment, economy and healthy community	-Create healthy communities - through community-based initiatives, partner with Simon Fraser Health Region -Reduce hazardous exposures	-Create healthy communities by addressing SDOH -Promote healthy lifestyles -Reduce hazardous exposures	-Create healthy communities	N/A
Well-being	-Enhance availability, access, and appropriateness of services, programs	-Enhance safety and security -Reduce exposures to pollution	-Conserve energy, preserve environment -Provide array of services	-Prevent crime, nuisance behaviour -Enhance community identity, pride	N/A
Disease or Illness	-Accessible infrastructure, services -Special needs housing	-Accessible transportation -Special needs housing	-Reduce injuries, illnesses	-Special needs housing	-Accessible services

5-2 DISCUSSIONS OF OUTCOME DIFFERENCE FRAMES

When differences in outcomes were discussed, the discussions fell into one of three frames: 'equality or inequality', 'equity or inequity', and 'SDOH or health determinants'. A total of 19 passages across the five OCPs framed outcome differences along these dimensions (Table 5-3). 'Equity or inequity' was the most commonly employed frame for discussing outcome differences (N=13), and Burnaby and Richmond were the most likely to employ one of the three frames (both at N=6).

Thematic analyses demonstrated a tendency among both 'equality'- and 'equity'-framed passages to focus on the distribution of, and access, to services and facilities across the city (Table 5-4). The 'SDOH'-framed passages described healthy communities as products of the interplay between social, environmental, and economic factors. The Burnaby OCP discussed the 'SDOH' as follows:

> The determinants of health go beyond the availability of medical care services; they include such diverse elements as housing adequacy and quality, income levels, job opportunities, and people's sense of control over their lives. (City of Burnaby 1998: paragraph 937)

Meanwhile, Richmond's was the only OCP to employ the 'equality' frame in a context that went beyond basic access to services and facilities:

> The benefits of investment in high quality child care/early childhood education include supporting healthy child development and success in school; facilitating the economic self-reliance of families by allowing parents to enter the workforce and/or to participate in training and education; helping to reduce poverty; and providing a key to women's economic equality. (City of Richmond 1999: paragraph 1451).

Table 5-3: Frequency of Mentions of Outcome-Difference Frames

Code	Municipality					Total by Code
	Burnaby	New Westminster	Richmond	Surrey	Vancouver	
Equality	1	0	1	1	0	3
Equity	4	0	4	3	2	13
SDOH	1	1	1	0	0	3
Total by Municipality	6	1	6	4	2	19

Table 5-4: Thematic Analyses of Outcome-Difference Frame Passages

Code[34]	Municipality				
	Burnaby	New Westminster	Richmond	Surrey	Vancouver
Equality	-Opportunity – access to libraries, services	N/A	-Childcare enhances women's economic equality	-Opportunity - equal distribution of parks, recreation facilities across City	N/A
Equity	-Equitable distribution of parks, open spaces throughout City	N/A	-Balance b/n maintenance costs and infrastructure value for social equity	-Distribution of parks, recreation facilities, social and cultural services across City	-Delivery of services, new jobs in neighbourhoods
SDOH	-The SDOH include housing, income, jobs, sense of control	-Healthy communities are the product of the health determinants – social, economic, and environmental factors	-Healthy communities are shaped by environmental aspects, housing, jobs and mobility	N/A	N/A

[34] The codes 'disparity' and 'gradients' were removed from the codebook as they were never employed as a code in the OCPs.

5-3 DISCUSSIONS OF SDOH

5-3.1 Quantity of SDOH Passages

As expected, mentions of the SDOH varied considerably across the twelve SDOH, from N=0 for 'biology & genetic endowment' to N=577 (24.1%) for 'built environment' (Table 5-5). The two social environment determinants – 'social services' and 'community characteristics' – also generated considerable attention, while 'gender', 'social support networks', and 'early childhood development' were less prominent. As statements of community planning visions, it was not surprising that the determinants with an environmental focus received the greatest overall attention in the OCPs.

Inter-OCP differences in the proportion of SDOH mentioned are displayed in Figure 5-1. Differences between OCPs were observed for six of the SDOH. The 'education & literacy' and 'natural environment' determinants were mentioned most frequently in the Richmond OCP; Vancouver mentioned 'employment & working conditions' most often and 'built environment' least often; and Surrey mentioned 'social services' least and 'personal health practices' most.

The intersection of 'health' and SDOH-coded passages was also explored, and the results are summarized in Table 5-6. A total of 66 intersecting passages were generated. Thus, 2.8% of all SDOH-coded passages were also 'health' coded. Of these, the determinants that intersected most with 'health' were 'natural environment', 'personal health practices and coping skills', 'community characteristics', and 'social services', collectively constituting 43 of the 66 intersections, suggesting health was conceptualized fairly broadly in the OCPs.

Table 5-5: Frequency of SDOHs Mentioned

SDOH	Municipality					Total by Code
	Burnaby	New Westminster	Richmond	Surrey	Vancouver	
Income & Social Status (ISS)	11	28	12	18	16	85
Social Support Networks (SSN)	10	3	7	1	3	24
Education & Literacy (EL)	15	28	34	18	10	105
Employment & Working Conditions (EW)	40	57	24	32	44	197
Social Environment I – Social Services (SE I – SS)	77	111	53	38	52	331
Social Environment II – Community Characteristics (SE II – CC)	81	112	65	61	40	359
Physical Environment I – Built Environment (PE I – BE)	107	196	99	124	51	577
Physical Environment II – Natural Environment (PE II – NE)	51	69	60	39	34	253
Personal Health Practices & Coping Skills (PHPCS)	57	78	51	78	23	287
Early Childhood Development (ECD)	7	10	8	4	3	32
Biology & Genetic Endowment (BGE)	0	0	0	0	0	0
Health Services (HS)	13	14	5	6	8	46
Gender (GE)	4	0	2	1	0	7
Culture & Tradition (CAT)	16	31	21	17	11	96
Total by Municipality	489	737	441	437	295	2399

Table 5-6: Number of Intersecting Passages for SDOH and Health Codes

SDOH	Number of Passages
Income & Social Status (ISS)	3
Social Support Networks (SSN)	1
Education & Literacy (EL)	4
Employment & Working Conditions (EW)	3
Social Environment I – Social Services (SE I – SS)	8
Social Environment II – Community Characteristics (SE II – CC)	9
Physical Environment I – Built Environment (PE I – BE)	5
Physical Environment II – Natural Environment (PE II – NE)	16
Personal Health Practices & Coping Skills (PHPCS)	10
Early Childhood Development (ECD)	3
Biology & Genetic Endowment (BGE)	1
Health Services (HS)	3
Total	66

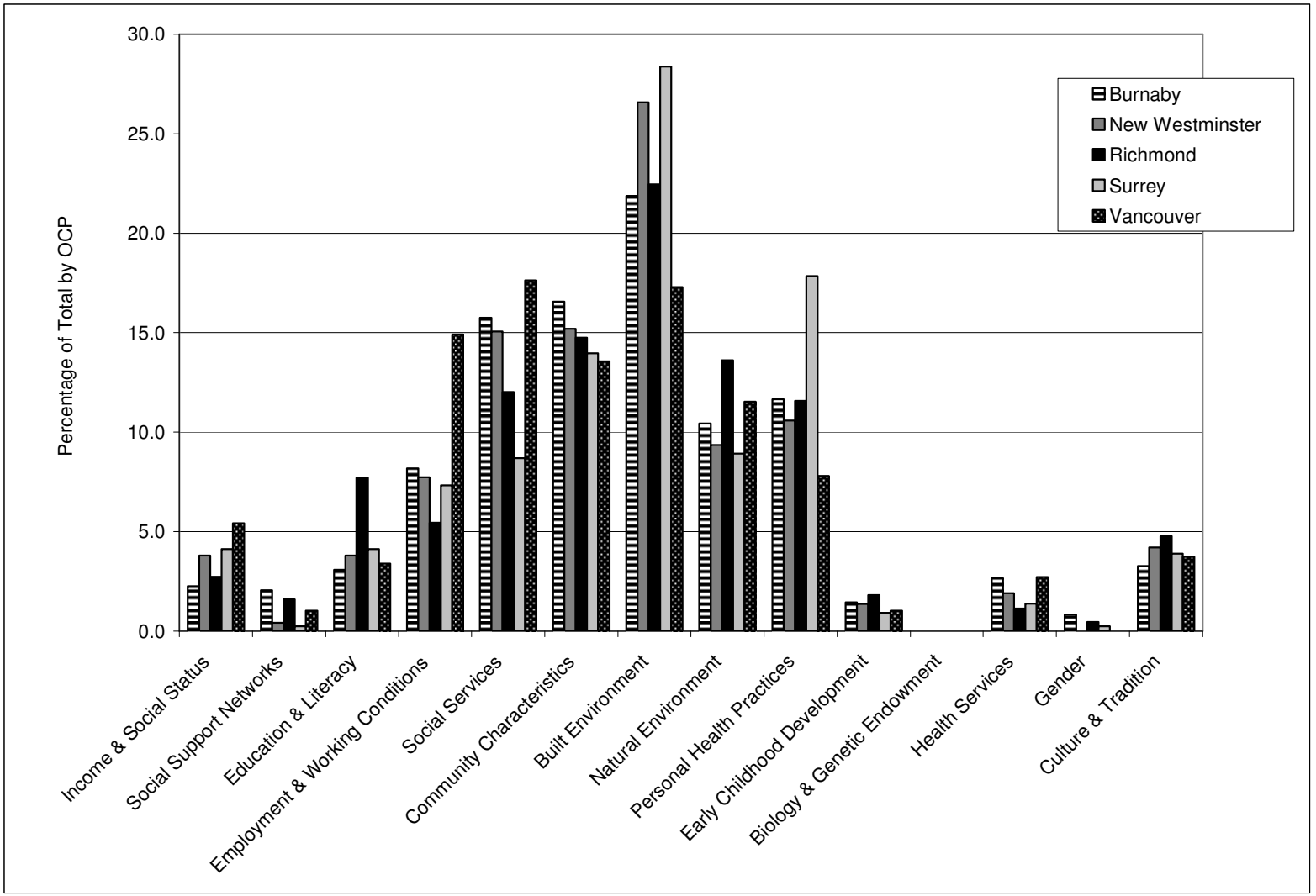


Figure 5-1: Percentage of SDOHs Mentioned across OCPs by Total SDOH Mentioned

5-3.2 Thematic Analyses of SDOH Passages – Common Themes

After extracting key themes from SDOH-coded passage within each OCP (Appendix 14), common themes were drawn across OCPs and summarized in Table 5-7. Themes were considered common if they appeared in 3 or more OCPs in a SDOH-coded passage. Increasing, and improving upon existing, City-based services, programs, and facilities was commonly mentioned; from increasing affordable housing (ISS), providing childcare facilities (ECD), increasing arts & cultural programs (CAT), providing support-based (SSN) and community-based (SS) services, to advocating for improvements in healthcare services (HS). While every municipality encounters unique problems, the fact that numerous SDOH-related interventions were mentioned in multiple OCPs in this study suggests there may be some degree of universality in prescribing avenues of potential intervention on health inequities by municipal governments.

Another commonality across multiple determinants was the focus on issues of environmental sustainability. Common themes included intensification of land use to create complete, compact communities (BE), reduce impacts on the natural environment (NE), increase opportunities for alternative travel (PHPCS), offer opportunities for residents to work closer to home (EW), and create more cohesive neighbourhood centers (CC). The recurrence of these themes likely reflects the requirement that the municipalities incorporated growth strategies employing the LRSP principles in their OCPs.

Table 5-7: Common Themes across OCPs for SDOH

SDOH[35]	Common Themes
ISS	**-Create affordable housing – protect rental stock; encourage secondary suites; encourage market & non-market development; lobby senior governments; subsidize housing units; fast-track non-market housing approvals** **-Income diversity and fluidity – recognize income changes over lifecycle; provide universal access to services opportunities, facilities, and transportation regardless of income; provide diverse housing options for diverse incomes**
SSN	**-Provide targeted support services –seniors, youth, special needs; facilitate independent living, aging-in-place**
EL	**-Integrate school and community-based facilities for cost-sharing, mutual benefits** **-Form partnerships – with school board, library & park boards, local post-secondary institutions, Ministry of Education** **-Schools within walking distance of homes, safe routes for children to local schools** **-Educate the public – environmental stewardship, heritage, crime, emergency preparedness**
EW	**-Work close to home – home-based employment; residential intensification in high employment & amenity areas; neighbourhood centers/growth concentration areas with diverse employment opportunities** **-Intensification – intensify existing industrial, commercial, and institutional facilities and nodes; attract employment-intensive industries and businesses; concentrate employment opportunities near transit nodes; improve transit facilities and road capacity in employment nodes** **-Diversify economic base, promote employment in all sectors, retain existing productive employment**
SE I – SS	**-Social and community services are key elements of compact and complete communities – diverse range of services, within walking distance** **-Provide social and community services – high quality, accessible (physically, economically, socially, culturally), appropriate (type, scale, design, location, amount), efficient, effective, equitable, foster independence, responsive to community input, ensure livability** **-Partnerships and advocacy – work with local residents, non-profit agencies, senior governments, private sector to ensure solve local problems, ensure local needs are being met, tailor services to meet individual and community needs** **-Community policing – ensure it is rooted in public priorities; tackle crime and nuisance behaviour; increase traffic safety and emergency assistance**

[35] The code 'biology and genetic endowment' was removed from the codebook as it was never employed as a code in the OCPs.

SDOH[35]	Common Themes
	-Service intensification – redevelop and intensify social and community services in urban nodes or neighbourhood centers to increase access and availability, in close proximity to where people live
SE II – CC	**-Increase safety and security – reduce crime and nuisance behaviour through CPTED, community-informed community policing, infrastructure improvements, police visibility** **-Neighbourhood centers – create neighbourhood centers that form heart of distinct neighbourhoods; to offer focal points for the community; create public gathering places to foster community cohesion, identity, and pride; pedestrian-oriented** **-Preserve community assets – preserve parks & open spaces, heritage resources, natural resources, affordable housing; ensure new developments reflect existing neighbourhood character** **-Foster civic pride and identity – promote local arts, culture, and diversity; build on city's character through festivals, events, and public art; street beautification; promote positive intercultural relations and disability awareness; public education campaigns** **-Community engagement – involve community in decisions on social planning, community policing, impact assessments, land-use; respect community values**
PE I – BE	**-Compact/complete communities – people live close to where they work, reducing need to travel; provide high quality and appropriate amenities within walking distance; development that prioritizes walking and cycling** **-Development that respects neighbourhood context – protect heritage buildings; conforms to existing neighbourhood character** **-Improve road system – maximize efficient movement of people, not vehicles; improve movement for trucks, HOVs, cyclists, transit; no new added capacity; implement traffic calming, buffering and screening; major/minor roads; grids** **-Protect, adapt heritage buildings** **-Accessible, high quality, user-friendly, well-located public facilities and amenities – utilities, schools, recreation and parks, libraries, health, religious, police; implement cost-sharing for joint use facilities, especially schools; maintain and upgrade facilities whenever necessary** **-Utilities and infrastructure – encourage development where utilities and infrastructure are in place; ensure utilities, waste removal systems, are well maintained, of high quality; support industrial sector with utilities, infrastructure; use utilities and infrastructure efficiently and effectively; lobby senior governments for infrastructure improvements; ensure new developments provide necessary infrastructure and utilities**
PE II – NE	**-Protect ESAs – designate Green Zone lands; protect parks, open spaces, greenways, trails, agriculture from urban development and pollution; work in partnership with senior governments to preserve watercourses, wetlands, fish and wildlife habitats** **-Minimize impacts – of urban development and industry on natural and agricultural lands, air, water and soil quality; ensure**

SDOH[35]	Common Themes
	adequate buffering, noise and pollution-reduction caused by transportation system **-Provide high quality, comprehensive urban trail/greenway system that links parks, open spaces, greenways with urban environments** **-Consider environment, sustainability, ecosystem in urban design, planning, and development**
PHPCS	**-Promote alternative modes of travel – cycling, walking, public transit** **-Provide infrastructure for cyclists – rights-of-way, aesthetics, safety, transit friendly, lockers, racks, showers** **-Develop a comprehensive regional cycling network that offers links to employment and amenities and is safe, convenient, and efficient** **-Pedestrian-friendly built environment – pedestrian friendly, pedestrian oriented, pedestrian scaled; safe and efficient for passage by foot, scooter, bike, wheelchair, etc.; mixed-use neighbourhoods that offer destinations within walking distance** **-Parks, open spaces, & recreation facilities – protect existing resources; provide more resources; ensure resources are equitably distributed across the city; ensure resources are responsive to local needs; support passive and active recreation for people of all ages**
ECD	**-Provide childcare facilities – licensed facilities; close to home; in new developments**
HS	**-Ensure local health needs are met – inform regional health board of local needs; work with health board to ensure diverse array of services are being provided to local residents; deliver comprehensive care**
GE	**N/A**
CAT	**-Provide arts and cultural services, facilities, opportunities, amenities** **-Promote arts – work with community arts programs; support developments of arts and entertainment venues; promote public art and private investment in local artists; promote community-based events and festivals** **-Preservation – preserve resources of historical or cultural significance** **-Promote intercultural relations – promote community cultural events; promote cultural inclusivity and increased integration of diverse populations; increase cultural awareness among public**

5-3.3 Thematic Analyses of SDOH Passages – Unique Themes

After extracting common themes across OCPs, themes that were unique to particular OCPs were documented (Table 5-8). Themes were considered unique if they appeared in only one OCP for a given SDOH. Several municipality-specific trends in SDOH themes were observed, and reflected the issues of unique concern or interest in each municipality.

Unique SDOH-themes in the Burnaby OCP focused on building community-based social capital (SSN, SS, HS), drawing clear associations between built and natural environments (BE, NE), and fostering inclusivity and equity for marginalized populations (ECD, GE, CAT). Unique New Westminster themes stressed the need for advocating on behalf of disadvantaged groups for increased social assistance and public programs (ISS, EW, SS, ECD), providing supports for youth (EL, EW, PHPCS), and promoting the local tourism sector (CC, BE, NE). Richmond themes mentioned promoting and protecting agricultural land (ISS, CC, BE), and fostering women's equality through support services and advocacy for national day care (ECD, GE). Implementing Crime Prevention through Environmental Design (CPTED) to improve building design and reduce nuisance behaviour (BE, PHPCS) was stressed in the Surrey OCP, and improve environmental quality through various city programs (BE, NE) was a focus of the Vancouver OCP.

Table 5-8: Unique Themes across SDOH for OCPs

	SDOH	Unique Themes
Burnaby	**SSN**	**Community-based self-help initiatives**
	EL	**Improve transportation facilities to schools**
	EW	**Provide amenities that attract employment growth**
	SE I – SS	**Neighbourhoods are basic unit of planning for social and community services**
	PE I – BE	**Establish appropriate relationships between built environment, air, land and water quality; adopt an ecosystem and stewardship perspective in land-use decisions, public works, and infrastructure development**
	PE II – NE	**Inextricable link between natural environment, economic health, and community health**
	ECD	**Advocate to senior governments for national childcare; recreational facilities for children**
	HS	**Develop continuing care facilities**
	GE	**Increasing number of women in the labour force**
	CAT	**Support development of religious facilities**
New Westminster	**ISS**	**Break the cycle of poverty – lobby and work in partnership with senior governments to increase assistance for low income earners; provide comprehensive care that addresses poverty**
	EL	**Deliver youth programs in schools**
	EW	**Reduce local unemployment and reliance on social assistance by forming partnerships with Province and local agencies; create employment opportunities for youth; balance population and employment growth**
	SE I – SS	**Advocate on behalf of seniors, youth, special needs, poor, unemployed, homeless**
	SE II – CC	**Promote tourism sector**
	PE I – BE	**Promote tourism by developing new arts, culture, and recreational facilities; encourage energy efficiency in new buildings and development; target non-market supportive housing facilities at mentally ill, seniors, disabled; ensure high health and safety standards for aging stock and new building developments**
	PE II – NE	**Replace street trees in poor health, beautify streetscapes**

	SDOH	Unique Themes
	PHPCS	Reduce nuisance behaviours by offering youth-based programs
	ECD	Implement municipal child-care strategy
	HS	Ensure transition homes and health centres are well integrated into community; encourage hospital facility expansion
Richmond	EW	Protect productive agricultural land uses; promote city as industrial employment centre
	SE I – SS	Foster intercultural relations through public consultation, awareness campaigns and cultural services
	SE II – CC	Community commitment to maintain agricultural land
	PE I – BE	Protect agricultural land using buffers, roadways, clear urban-rural divides, reduce transportation related impacts; ensure buildings for seasonal farm labour accommodations comply with all zoning and building regulations
	PE II – NE	Balance economic growth with natural environment and social well-being, build on 'garden-city' reputation by creating a park-like city
	PHPCS	Promote walk-to-school and employer-based trip reduction programs
	ECD	Advocate to senior governments for national childcare; develop child-friendly housing
	HS	Improve emergency response services and systems
	GE	High quality affordable day care to promote women's economy equality
Surrey	ISS	Facilitate honourable, dignified living
	SSN	Support services for agricultural sector
	EL	Elementary schools as key component of urban neighbourhood
	EW	Ensure supply of marketable land for employment growth
	SE I – SS	Involve the community in decisions on social services planning and delivery
	PE I – BE	Implement CPTED when designing new buildings; strong local economy, adequate tax base to support provision of facilities and services; encourage energy efficiency in new buildings and developments
	PE II – NE	Encourage businesses that operate in environmentally responsible manner

	SDOH	Unique Themes
	PHPCS	**Reduce nuisance behaviours through CPTED, protect suburban lifestyle in face of growth concentration, balance efficient movement of goods with walking and cycling provisions**
	ECD	**Locate schools in close proximity to homes**
	HS	**Consider emergency service needs in neighbourhood design and development**
	GE	**Recognize unique housing needs of abused women**
Vancouver	**EW**	**Coordinate efforts and activities across city departments to provide more integrated community services, and develop Integrated Service Teams to more effectively deliver services in neighbourhoods**
	PE I – BE	**Increase recycling program, implementing polluter pay programs, conservation of water and electricity**
	PE II – NE	**Encourage water conservation, recycling, alternative transportation to improve air and water quality**
	ECD	**Provide programs for children and youth**
	CAT	**Form partnerships with school, library and park boards, non-profits and private sector**

5-4 DISCUSSIONS OF INTERVENTIONS AND CHALLENGES

5-4.1 Quantity of Passages for Interventions and Challenges

Like the SDOH-coded passages, the quantity of intervention-coded passages varied considerably across the six interventions, from N=40 (2.5%) for 'health promotion, education, strategies', to N=547 (34.5%) for 'improve social, physical environment' (Table 5-9). 'Inter-governmental initiatives, relations, roles' featured often, while 'develop community partnerships, networks' was the second least discussed intervention. Thus, 'status quo' interventions generated the greatest attention in the OCPs, while interventions requiring municipalities to operate beyond their slated responsibilities or jurisdictions generated the least attention. The low quantity of passages discussing 'challenges' (Burnaby N=56; New Westminster N=41; Richmond N=51; Surrey N=32; and Vancouver N=26) suggests that official municipality vision statements do not represent the appropriate venue for such discussions (especially if they alienate institutions or sectors that are instrumental in implementing the municipality's vision). Only 1.6% (26/1587) of all intervention-coded passages were also 'health' coded, highlighting the lack of congruence between scholarly discourses on health inequities and municipal policy discourses.

Inter-OCP differences in the proportion of interventions mentioned are displayed in Figure 5-2. With the exception of Vancouver which focused more on 'conducting assessments, gathering local data', the intervention that generated the most attention in the OCPs was 'improve social, physical environment', with New Westminster and Surrey devoting over one-third of intervention discussions

to this topic. Relative to the other four municipalities, Burnaby devoted the most attention to 'inter-governmental initiatives, relations, roles', while New Westminster devoted the least to 'intra-governmental capacity, leader, facilitator'.

Table 5-9: Frequency of Total Mentions of Municipal Interventions, and Number of Municipal Interventions Intersecting with Health Codes

Code	Municipality					Total by Code	Number Intersecting with Health Passages
	Burnaby	New Westminster	Richmond	Surrey	Vancouver		
Conduct assessments, gather local data	65	84	58	45	35	287	2
Health promotion, education, strategies	4	18	8	3	7	40	7
Inter-governmental initiatives, relations, roles	87	64	65	68	21	305	8
Intra-governmental capacity, leader, facilitator	45	39	58	54	29	225	3
Develop community partnerships, networks	43	43	46	28	23	183	2
Improve social, physical environments	106	174	114	120	33	547	4
Total by Municipality	350	422	349	318	148	1587	26

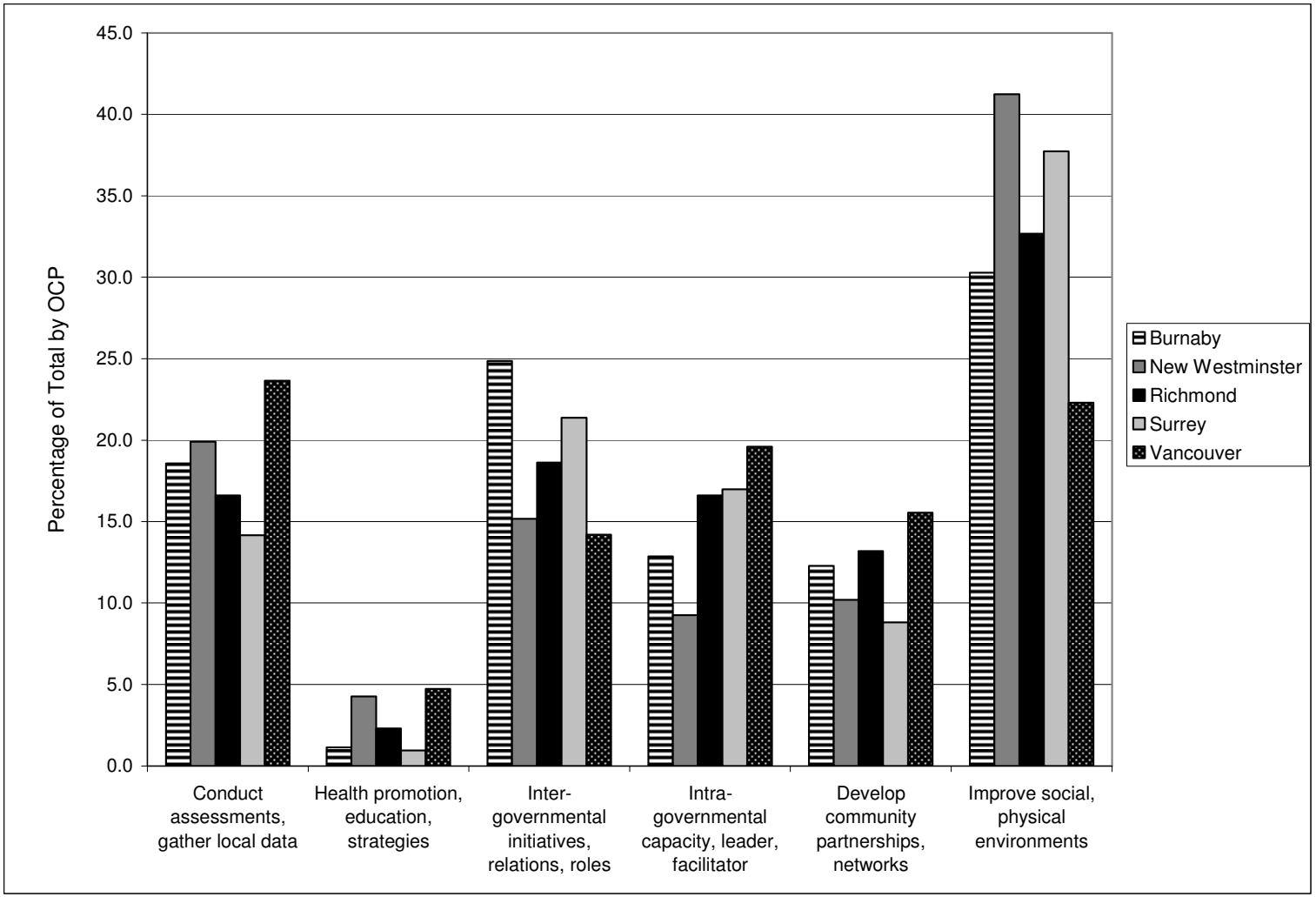


Figure 5-2: Percentage of Interventions Mentioned across OCPs by Total Interventions Mentioned

5-4.2 Thematic Analyses of Intervention and Challenge Passages – Common Themes

After extracting key themes from intervention- and challenge-coded passages within each OCP (Appendix 15 and Appendix 16, respectively), common themes were drawn across OCPs and summarized in Table 5-10. Recurring 'intervention' themes were environmental stewardship, creating complete communities, coordinated and comprehensive planning and service delivery, and partnerships with key stakeholders (e.g., Provincial ministries, neighbouring municipalities, school boards, local non-profits, etc.) to implement such interventions. The complexities of environmental stewardship, and the challenges associated with it, are captured in the following passage:

> Environmental stewardship should be viewed as a shared responsibility of senior and local governments, non-government organizations, the private sector and the general public. For its part, the City is committed to continue to show leadership in this area. It acknowledges the fact that environmental stewardship runs deeper than regulatory bylaws or individual initiatives. Such stewardship must reflect an attitude that extends both broadly and deeply within the City's organization, the community at large, the development industry and other levels of government. (City of Burnaby 1998: paragraph 76)

A number of challenges were also articulated in the OCPs, including increased downloading of responsibilities from senior governments (e.g., social planning responsibilities); reductions in transfers from senior governments (e.g., infrastructure and facilities); constraints imposed by Provincial legislation (e.g., Growth Strategies Act); lack of jurisdictional responsibility (e.g., environmental stewardship); and population growth amidst shortages in affordable housing

options. The multitude of challenges these municipalities face in implementing their OCPs are captured in the following passage:

> However, with increasing population, changing demographics, downloading of services from senior levels of government, and increasing demands and expectations of the public, civic governments must look for a variety of ways to ensure services are available, and to fund facilities and operations. (City of Richmond 1999: paragraph 1432)

Table 5-10: Common Themes across OCPs for Municipal Interventions and Challenges

Interventions & Challenges	Common Themes
Conduct assessments, gather local data	-Community engagement – seek input/involve the community in decisions regarding growth management, safety, zoning, environment, housing, heritage, parks & recreation, policing priorities, service priorities, and budget priorities -Reflect local values – ensure OCP adequately reflects local values and priorities; conduct community consultation to capture local values, formulate community vision and priorities -Impact assessments – assess and monitor impacts of local decisions regarding development, land-use, transportation, growth on environment, agriculture, community well-being, and infrastructure capacity
Health promotion, education, strategies	-Comprehensive care – work with regional health board, senior governments to ensure a comprehensive care model is delivered to local residents; provide acute care, public health, mental health, continuing care services as well as housing, employment and addiction support services
Inter-governmental initiatives, relations, roles	-Regional context statement – demonstrate the compatibility and consistency between local (OCP) and regional (LRSP) plans, strategies, and policies around growth management, livability, ecological preservation -Work with local governments on growth management, environmental stewardship, public transit, regional cycling network, regional transportation system, regional Green Zones, land use and environmental issues on border regions -Work with senior governments – for environmental stewardship, agricultural land protection, subsidized and special needs housing, public transportation, child care, institutional care facilities, reducing poverty, homelessness, and unemployment, addressing needs of seniors, public safety, implement flood protection strategies, accommodate housing and transportation needs of airport, regulate shoreline development, improvements in infrastructure, communications, utilities and tourism sectors, improve pedestrian environment, reduce single-occupant car travel -Put LRSP into action – promote complete communities, designate Green Zone lands, develop efficient public transit, develop in growth concentration areas -Take advantage of Provincial policy changes on density bonuses, secondary suites, social planning activities
Intra-governmental capacity, leader, facilitator	-Environmental steward – lead by example by using energy wisely, minimizing production of waste, protecting farmland, ecosystem, and watersheds, and incorporating sustainability principles in land-use decisions -Coordinated social planning – develop a social planning strategy that is integrated, comprehensive, and multi-departmental; coordinate social programs, services, and facilities that serve the public across providers -Integrated planning – integrate land use planning with transportation planning, public utility planning, provision of utilities and

Interventions	Common Themes
	infrastructure; integrate parks and school facility planning; ensure compatibility between land use planning and other planning areas -Advocate, funder – advocate for social issues (e.g., subsidized housing) by providing funds or assisting in raising funds for local agencies, lobbying senior governments, and provide facility space for operations
Develop community partnerships, networks	-Collaborate with local non-profit agencies - for community development and social planning activities, to assess local needs and deliver tailored services, facilities and utilities -Collaborate with school board – to develop joint-use school and park facilities, to promote educational and community use of facilities and open spaces, and to make school facilities multi-purpose and a focal point for neighbourhoods -Affordable housing partnerships – form partnerships with local housing societies/non-profit housing groups, funding agencies, developers and senior governments to increase the supply of non-market/subsidized/affordable housing
Improve social, physical environments	-Parks, open spaces – provide parks and recreation facilities equitably throughout city and ensure they meet local needs, develop an urban trail system, promote development of utility corridors as open spaces, upgrade and expand park amenities, encourage developers to provide recreation facilities in private facilities -Transportation - improve and increase attractiveness of the public transit system; implement transit priority measures; encourage residential and commercial development along rapid transit corridors; promote street-level barrier-free pedestrian-oriented activity and movement; improve rights-of-way for pedestrians, cyclists, and HOVs; implement system of major and minor roads, with traffic calming on minor roads; create transit-friendly streets with bus bulges, lanes and shelters; reduce impacts of transportation facilities through buffering and noise resistant buildings; provide cycling infrastructure (parking, storage, end-of-trip facilities) throughout the city; encourage employer trip reduction/ride-share programs, improve roadways/transportation links for inter-regional truck and vehicular traffic for efficient movement of goods; improve road infrastructure to emphasize and accommodate non-automobile travel and discourage single-occupant travel; consider innovative parking arrangements and reduce parking facilities -Industrial - review existing industrial developments for utility and benefit to community and to ensure its compatibility with existing areas, uses, and contexts; consider redevelopment of outdated permitted commercial developments in industrial zones; remove/expand professional/office and retail developments from industrial zones; infill and densify industrial zones for continued industrial use; enhance utility services for industrial zones -Housing - construct ground-oriented housing; implement density bonuses to replace rental housing in new developments; promote development of secondary suites; develop a variety of housing types in urban villages; rezoning, intensification and redevelopment of under-utilized land; rezone land for smaller lot, multi-family, higher-density residential use; convert City-owned land into affordable housing; replace existing rental housing with more affordable housing; expedite rezoning and development permits for affordable housing complexes; ensure new multi-family developments resemble existing single-family units in neighbourhoods; promote multi-family developments on arterial roads where similar developments exist; retain single-family dwellings outside of neighbourhood centres

Interventions	Common Themes
	-Environmental stewardship - promote energy conservation in City operations and activities; promote stewardship in any investments in public works and infrastructure; promote recycling, backyard composting, decreased waste; expand waste reduction and water conservation programs; improve storm and waste water management; promote the creation of energy efficient communities; support residential developments that reduce energy use; support mixed use facilities for shared energy use; encourage and attract eco-friendly businesses -Streetscapes, city identity - improve streetscapes, walkability and accessibility of neighbourhood centers to enhance local identity and sense of place; provide street furnishings, street lighting, signage, underground wiring, traffic calming, curb cuts, and high quality sidewalks; protect street trees, create distinctive landscaping and treescapes; encourage public art and promote street festivals; ensure new developments respect local character and identity -Complete communities - create/redevelop town/neighbourhood centers into mixed-use, high density, complete communities; promote walking, cycling and transit use in neighbourhood centers; ensure neighbourhood centers have transit nodes with safe and convenient connections; increase opportunities to live closer to transit, facilities, and services; promote intensification, redevelopment and infill of serviced land that is close to amenities, infrastructure, and along transportation corridors; promote adaptive reuse of historic buildings, retain and restore historic facades; reduce parking requirements near transit nodes -Facilities, infrastructure, utilities and services - provide a broad range of high quality and appropriate amount of community facilities, services, spaces, infrastructure, public utilities, and roadways, and make efficient and effective use of these public resources; ensure constant maintenance and upgrading of public works infrastructure and services; replace and rehabilitate sewer, stormwater, drainage, water, and roads, manage waste disposal, collection and recycling; acquire and develop public school facilities that can be used for community purposes; ensure capacity of utilities, services, infrastructure keep pace with growth; maintain a strong local economy to maintain adequate revenue source/tax base to pay for infrastructure and services; lobby senior governments for major infrastructure improvements -Agriculture - provide adequate buffering to protect farmland and ESAs; improve irrigation, drainage, and diking systems for farmers; improve access routes for farming purposes and restrict development of new roads in the ALR
Challenges	-Social planning - Local Government Act of 1994 bestowed upon municipalities increased responsibility for social planning activities (downloading), funding for social programming from senior governments has decreased and will become increasingly more difficult to secure; need to ensure that community services and facilities will be available to meet increasing needs of growing population; need to coordinate and integrate delivery of human services provided by different levels of government to ensure local needs are met; need to advocate on behalf of these high-needs residents to Province for increased funding for social assistance programs, need to monitor and evaluate these Provincial programs and services -Tax base – ensure adequate tax base to provide necessary community facilities and services; intensify viable commercial and industrial development to increase growth of tax base and employment; remove existing commercial land uses that no longer meet contemporary needs or employment and tax base objectives; remove constraints on industrial development; promote economic development to achieve a balance between residential and business tax bases; increase share of tax revenue from non-residential sources; increase property taxes and user fees to pay for necessary services and to make up for fiscal restraint

Interventions	Common Themes
	from senior governments; implement gas taxes and bridge tolls to increase revenue; decrease City services to reduce expenditures -Development & population growth – increase housing and employment while respecting and preserving existing community character and assets; strong differences in opinion of what constitutes appropriate scale and character for new development; maximize effectiveness of senior government funding for subsidized housing by requiring non-market housing units in new developments; uncertainty over how to generate funds for non-market housing in context of senior government funding cuts; remove (cost and zoning) impediments to development of cost-effective housing especially for seniors and special needs; remove impediments for developers in providing community amenities; Provincial legislation for secondary suites; work with non-profits and non-governmental agencies to increase stock of non-market housing; ensure developers bear costs of providing associated infrastructure and amenities for new developments; Provincial legislation requires inter-municipal coordination in development of growth-related plans and policies -Environment - environmental stewardship a shared responsibility across all levels of government, private sector, non-profits, and general public; integration of senior and local government requirements and regulations regarding environmental management of land use; factors affecting environment are geographically broad and overlapping but jurisdictional responsibilities are divided up among different government; City lacks jurisdiction in key policy areas; work in partnership with Province and in accordance with Provincial legislation for maintenance and management of dykes and supporting local agriculture -Transportation - transportation infrastructure improvements are the combined responsibility of other municipalities, regional government, Translink and the Province; Province is offloading responsibility of roads to regional government; create settlement patterns that reduce automobile reliance in accordance with the Growth Strategies Act; work with other governments to develop Regional Major Roads network to increase efficient movement of goods; work with regional and Provincial governments, other GVRD municipalities to investigate viable transit alternatives and improvements, and on initiatives to reduce single-occupant vehicle travel; difficult to improve transit in period of Provincial fiscal restraint -Infrastructure, facility, and public services – must be done within context of funding cuts from senior governments; fewer resources available places strain on City's ability to maintain standard of living and address city-wide priorities and needs; increased need fuelled by high public expectations for services and infrastructure and growing populations; City working in a "do more with less" environment and downloading of responsibilities from senior governments

5-4.3 Thematic Analyses of Intervention and Challenge Passages – Unique Themes

'Intervention' and 'challenge' themes that were unique to particular OCPs are summarized in Table 5-11. Several municipality-specific trends were observed. The Burnaby OCP stressed the need for consultation (e.g., local communities, neighbouring municipalities) in planning initiatives. The New Westminster OCP demanded greater accountability from senior governments, stressing the importance of monitoring, and advocating on behalf of, social needs of local residents, and monitoring and evaluating the effectiveness of Provincial programs in meeting these needs. Unique themes from Richmond focused on ensuring social and emergency services are available, accessible, responsive to local needs, and conform to the priorities and budgetary constraints of the OCP. Promoting development that enhances image and social fabric, reducing the social impacts of growth, and supporting innovative developers and businesses (e.g., promote work/live concept, agricultural-related, provide recreation facilities) were unique Surrey themes.

Table 5-11: Unique Themes across Municipal Interventions and Challenges for OCPs

	Interventions & Challenges	Unique Themes
Burnaby	**Conduct assessments, gather local data**	**Conduct neighbourhood-level planning, community transportation planning**
	Inter-governmental initiatives, relations, roles	**Promote coordinated growth management across municipalities to ensure that regional growth management strategy can be achieved**
New Westminster	**Conduct assessments, gather local data**	**Monitor employment targets, housing stock, growth, socioeconomic conditions; monitor needs for child care, aging, special needs populations and school populations, social programming from senior governments, housing affordability and availability; monitor and evaluate provincial programs, Simon Fraser Health Region's plans, city services and facilities; involve youth in decision-making; assess the feasibility of LRT**
	Inter-governmental initiatives, relations, roles	**Study, monitor, evaluate – effectiveness of Provincial social programs, feasibility of regional cycling greenways, environmentally sensitive areas; strengthen local environmental policies with senior government environmental policies; participate in regional transportation demand management initiatives**
	Intra-governmental capacity, leader, facilitator	**Work proactively to strategically enforce neighbourhood livability by targeting nuisance businesses, behaviours, crimes, liquor licenses, building safety; facilitate partnerships, communication between non-profit, CBOs, private sector**
	Develop community partnerships, networks	**Advocate for the needs of the poor, seniors, disabled populations by assessing service delivery of local providers, provide funding and lobby senior governments for more funding for CBOs**
	Challenges	**Greater fiscal accountability among senior governments; LSRP deemed a growth strategy by Province yet needs to be implemented in cooperation with other GVRD municipalities, regional government, and senior governments**
Richmond	**Conduct assessments,**	**Assess feasibility of redeveloping industrial land for high-density, mixed use**

	Interventions & Challenges	Unique Themes
	gather local data	
	Intra-governmental capacity, leader, facilitator	Facilitate development of transition homes for needy populations; facilitate availability and awareness of services for seniors, special needs groups
	Develop community partnerships, networks	Work in partnerships with community organizations to deliver emergency services, establish crime prevention programs, increase awareness of safety issues, disaster preparedness
	Challenges	Work with School and Regional Health boards to ensure services meet local needs and that City bylaws and regulations do not restrict provision of education and health services; ensure OCP is implemented, monitored, evaluated regularly, conforms to budgetary constraints; need to operate according to plans and policies of senior governments (e.g., building heights near airport)
Surrey	Conduct assessments, gather local data	Minimize social impacts arising from growth
	Intra-governmental capacity, leader, facilitator	Ensure that subordinate departmental master plans conform to the OCP; promote new business development that facilitates complete communities and is compatible with the social fabric and structure of the city, facilitate the live/work concept; facilitate development and location of agricultural-related businesses and services, create an agricultural development strategy
	Develop community partnerships, networks	Form partnerships with private developers and non-profit groups to increase development of private recreation facilities and services within residential developments and workplaces
	Challenges	Work with private sector to provide funding for initiatives designed to improve the City's image and reputation
Vancouver	Health promotion,	Develop medical facilities in uptown area

	Interventions & Challenges	Unique Themes
	education, strategies	
	Develop community partnerships, networks	**Deliver community-based policing by working with community groups and partners**

CHAPTER 6: DISCUSSION

6-1 SUMMARY OF PHASE 1 FINDINGS: LITERATURE REVIEW

6-1.1 Amount, Timing, and Characteristics of Literature Reviewed

A total of 1004 abstracts were reviewed for the meta-narrative mapping exercise, with 94% of the abstracts emerging from the HP (N=641) and PH (N=307) literatures combined. That the HC and UH abstracts would constitute only 6% of the overall sample of abstracts is not surprising for several reasons. Rather than an academic line of inquiry per se, HC is a worldwide health *movement* designed to empower communities and cities to take action on locally defined health concerns (Flynn, Ray et al. 1994). The movement speaks to, and receives broad-based support from, governmental and non-governmental organizations alike, and consequently focuses its dialogue in the 'grey' literature that is not captured by academic databases (Duhl and Sanchez 1999; Kenzer 2000; DHHS 2001; Jones 2002). Meanwhile, the total number of UH abstract hits was smaller than the other bodies of literature, as UH did not emerge as a distinct field of research until the early 2000s (Tsouros 2000; Vlahov and Galea 2003). This small pool of abstracts, coupled with the fact that they most often did not fit the inclusion criteria (28% inclusion rate), generated a very small proportion of UH abstracts to be included in the meta-narrative mapping.

Publication activity in all four bodies of literature increased over time. The HP and HC abstracts dominated the first decade of the review, and the PH and UH literatures became more prolific over the second decade, mirroring the timelines of key developments in each of these fields of research. The publications of the Ottawa Charter and Epp Report in 1986 sparked the

emergence of HP (HWC 1986; WHO 1986) and the birth of the HC movement in Canada (Hancock 1987), while PH gained considerable momentum in the mid- to late-1990s (Evans, Barer et al. 1994; FPT-ACPH 1996; Wilkinson 1996), and UH emerged in the early 2000s (Freudenberg 2000; Tsouros 2000).

Given the geographic origins of the four health inequities literatures, the observations of some bibliographic trends were not surprising. Abstracts of Canadian origin were especially high among the PH literature, likely reflecting the strong influence of Canadian scholars in the development of this discourse (Evans, Barer et al. 1994; Dunn and Hayes 1999; Frankish, Veenstra et al. 1999; Hayes 1999b). Abstracts of European origin were most common among the HC literature, reflecting the fact that while the HC movement originated in Canada (Hancock 1987), Europe is currently at the forefront of HC policy interventions (Fulop and Elston 2000; Goldstein 2000; Plumer and Trojan 2004). The greatest concentration of abstracts originating from developing countries were from the UH literature, as much of the current UH research focuses on detrimental health impacts of rapid urbanization (McMichael 2000; Gracey 2002; Utzinger and Keiser 2006). Similar findings on the geographic origins of the health inequities knowledge base, especially of articles emerging from the HP and PH bodies of literature, have been observed elsewhere (Tricco, Runnels et al. 2008).

The epistemological traditions of the four bodies of literature likely account for the trends in study types and target populations that were observed. With their strong epidemiological roots (Coburn, Denny et al. 2003; Kaplan 2004), it is not surprising that population-based surveys with interests in the broader adult

populations dominated the PH and UH literatures, as surveys are commonly employed in these fields of research (Young 2005). Meanwhile, the orientation of the HC movement to community- and government-based action accounts for the preponderance of program evaluations, and target audiences of governments, researchers, and practitioners from this literature body. Finally, the relative diversity of study types and target populations among the HP literature likely reflects the age, maturity, and resulting diversity of research programs within this body of literature.

6-1.2 Thematic Contents of Literature and Changes Over Time

Four article themes were particularly prominent in the abstracts reviewed. 'Research-related' themes, constituting 13% of article themes, captured issues ranging from conceptual or theoretical concerns (e.g., debates between PH and HP), appropriate use of indicators, instruments, and methods (e.g., how best to measure income inequality), and assessments of knowledge gaps and translation (e.g., lack of program evaluations). The highest proportion of research-themed articles occurred in the first quarter, with a steady decline in the remaining 15 years of the review. That research themes were the most prominent, especially early on in the review timeframe, illustrates the early efforts to establish a coherent body of knowledge on health inequities, and the ongoing challenges inherent in this knowledge base to developing evidence-based policy.

The other three themes that occurred in roughly equal measure (≈8% each) were 'healthy lifestyles' (i.e., consumption of alcohol and tobacco, nutrition and physical activity, preventive screening, and vaccines), 'healthcare' (i.e.,

access and utilization, costs and expenditures, systems, delivery, primary care, and health human resources), and 'social policy' (i.e., social, public, health, urban planning or policy). The prominence of the 'healthy lifestyles' and 'healthcare' themes illustrate the ongoing tendencies – criticized decades earlier (Lalonde 1974) – for researchers to fixate on issues and interventions of a behavioural and biomedical nature. The prominence of the 'social policy' article theme might have suggested that a broader academic dialogue on health inequities *was* taking place. However, timeframe analysis revealed that 'social policy' coverage waned over the 20 year period timeframe, while coverage increased and remained consistently high over the 20 years for 'healthcare' and 'healthy lifestyles', respectively.

Similar findings were observed for the SDOH profile of the literature. The three most commonly profiled determinants – *personal health practices & coping skills, healthcare services, and social support networks* – reinforce the individualistic perspectives on population health inequities that emerged in the article theme analysis. While broader determinants, such as SE, ISS, and PE, were profiled, they constituted only 10% to 15% of all SDOH coverage over the entire 20 year time period. In contrast, coverage of PHPCS was at or above the 20% mark over the entire timeframe, and HC coverage increased considerably over time (from 5% in the first quarter to nearly 15% in the last). While significant differences existed in SDOH profiles between the PH and HP abstracts - PH literature was more likely to profile HC, ISS, and PE, while HP was more likely to profile the PHPCS, SSN, and EL – the results indicate that both bodies of

literature contributed (albeit uniquely) to the individualistic tone of the knowledge base.

A majority of abstracts in all four literatures, within each quarter of the 20 year timeframe employed a neutral discourse. That is, rather than framing health differences as inequities, inequalities, or disparities, most abstracts simply discussed the SDOH or the existence of particular health outcomes. Compared to the HP literature, PH abstracts were slightly more likely to frame health differences in a politically charged manner (i.e., 'inequalities' or 'disparities'), but such discussions were still a minority of the total. Overall, the discursive findings in this review are surprising as they run counter to ideological debates between the PH and HP camps that have accused one another of errant employment of politically charged discourses to convey their respective messages (Evans and Stoddart 1990; Evans, Barer et al. 1994; Coburn and Poland 1996; Robertson 1998; Hayes 1999b).

6-1.3 Implicating Municipal Governments

Less than one-fifth (17%) of the abstracts implicated municipal governments in any way. Seven categories[36] were established for potential municipal roles, responsibilities and activities to reduce population health inequities:

1) conduct health impact assessments, assess local health needs
2) deliver health promotion, public education programs on healthy lifestyles
3) develop inter-sectoral, intergovernmental partnerships

[36] The literature review generated two categories (3 and 4) pertaining to different elements of inter-governmental relations. The distinction between these two categories however, was not easily established in the analysis of OCPs. As such, categories 3 and 4 were collapsed into one category on inter-governmental relations in the third phase of the study.

4) improve intergovernmental relations, clarify jurisdictional responsibilities
5) improve capacity within local government, be a leader, advocate
6) join/build on existing networks and partnerships, be an active participant
7) improve social, economic, built environments through public policy

In the Canadian context, categories 1 and 2 deal with assessing health and social needs and delivering health-based services – assessments and service delivery that might typically fall outside the range and jurisdiction of municipal services (Elliott, Taylor et al. 2000; Mittelmark 2001). Categories 3 through 6 deal with relationships between the municipality and other governments, non-governmental organizations, and within the municipality itself (Jones 2002), while category 7 captures the types of responsibilities over which Canadian municipalities have clear existing jurisdiction, such as zoning, by-law enforcement, public libraries, and fire protection (Sancton 2000).

While abstracts of Canadian origin implicated municipalities the most (N=48), the proportion of these relative to all Canadian abstracts reviewed was relatively small (11%). This finding suggests that the overall Canadian contribution to the health inequities knowledge base has been minimal in terms of prescriptions for municipal activity on health inequities. In contrast, while small in number (N=13), the majority of abstracts of Mexican, South & Central American origins (65%) implicated roles for municipalities, likely attributable to the unique local health problems and greater role of municipal governance in these jurisdictions. In terms of health concerns, many cities in Mexico, South & Central America are simultaneously lacking basic municipal infrastructure and services to facilitate sanitary living conditions (Fischer 2006; Stevens, Dias et al. 2008), and face common Western-world health problems associated with rapid

urbanization (e.g., pollution-induced asthma) (Fischer 2006) and widespread adoption of sedentary lifestyles (e.g., obesity) (Ford and Mokdad 2008). Additionally, there exists a much stronger investment in participatory community-based approaches to tackling local health and social issues, as well as a stronger tradition of engagement with the Healthy Cities movement in these countries relative to Canada (Wallerstein 2002; Yassi, Fernandez et al. 2003; Becker, Edmundo et al. 2007; Mendes and Falvo 2007).

Considering both the total number (N=41) and the proportion (33%) of abstracts implicating municipalities, it would appear that the European literature has made the most substantial contribution to the academic dialogue on prescriptions for municipal governments to address local health inequities. The emphases placed on municipal governments by the European abstracts is not surprising, given the importance placed on healthy urban planning and the prominence of the Healthy Cities movement in the European context (Fulop and Elston 2000; Barton, Mitcham et al. 2003). With comparable (if not superior) municipal infrastructures and population health profiles, prescriptions arising from European literature bear some relevance and utility to the Canadian context. Indeed, it is worth noting that 'joining or building on existing local health networks and partnerships' was the most commonly cited role in both the European and Canadian literatures, suggesting that similar challenges and contexts for municipal intervention exist in these distinct geographical regions.

6-1.4 Recap of Phase 1 Findings

The findings from the first phase of the research can be summarized as follows:

- The majority of abstracts reviewed were from the HP and PH literatures; coverage increased considerably over time; HP and HC abstracts were dominant in first decade, while PH and UH became more prolific in the second decade of study; and abstracts of Canadian origin tended to be from the PH literature, while HC abstracts emerged from Europe and UH from the developing world;
- The contents of the abstracts reflected individualistic perspectives on population health inequities, stressing themes of healthy lifestyles and healthcare services; politically neutral tones were employed in a majority of abstracts; and
- Less than one-fifth of articles implicated municipalities; implications came from the less prolific literatures of HC and UH and abstract of non-Canadian origin; categories for municipal interventions included health-specific interventions outside typical municipal jurisdiction, relationships between municipalities and other entities to address local health issues, and improvements upon programs and services already slated for delivery by municipal governments.

6-2 SUMMARY OF PHASE 2 FINDINGS: SURVEY

6-2.1 Profile of Survey Participants

The methods employed to predict the response rate were clearly effective (section 2-3.3 – Estimated Response Rates), as the actual response rate of 54% was very close the anticipated rate of 55%. Strong concerns held by the City Manager regarding offloading of responsibilities by senior governments likely account for the low response rate from the City of Port Moody[37], while the high response rate obtained from the City of Richmond may reflect either a relatively strong commitment within that municipality to health issues, to public accountability, or to engagement with the research community. Response rates for *elected* officials were higher than expected[38], while response rates for non-elected officials were lower than those obtained in similar studies (Lavis, Farrant et al. 2001). It was particularly surprising that individuals from police departments were the most willing to participant, while parks, recreation & community service departments were the least willing to participate. This discrepancy may be an artefact of the sampling process; no more than two individuals in police departments were recruited, while upwards of ten individuals would have been recruited from some parks, recreation & community service departments. That most participants were highly educated, high-income earning

[37] Through email and telephone conversations, this individual articulated strong suspicions that the research was being 'contracted out' by senior governments to increase municipal responsibilities. Efforts were made to allay these concerns, but it was made clear that the 'municipality' would not be participating.

[38] Although one might counter that elected officials have a vested interest in articulating their opinions, regardless of whether their responses were kept confidential or not.

males likely reflects the educational requirements and compensation levels of the positions occupied, as well as lagging gender equity in Metro Vancouver municipalities.

6-2.2 Participants' Understanding of and Attitudes toward the SDOH

There was considerable consensus among participants in identifying the healthiest and least healthy neighbourhoods in their jurisdictions. Given the role that media can play in constructing realities regarding healthy and safe neighbourhoods (Reevely 2003; Hume 2006; Christoff and Kalache 2007; Ferguson 2007; Carrigg 2009), some of these congruencies may be attributable to media coverage and correspondent reputations that have developed for some Metro Vancouver neighbourhoods (e.g., Whalley in Surrey, Downtown Eastside in Vancouver) (Collins, Hayes et al. 2009). Whether these judgements accurately reflected health outcomes in those neighbourhoods was not assessed; but the relative congruence of opinions concerning health statuses of local populations across diverse departments and positions within these municipalities is noteworthy, as such agreement holds promise for engaging diverse municipal actors in developing interventions to reduce health inequities.

'Maintaining a healthy lifestyle' was assigned the most influence and highest priority for action, reflecting behaviouralist perspectives towards health among survey participants. Participants identified *individuals* as bearing the greatest responsibility for 'maintaining a healthy lifestyle', which likely accounts for the significantly lower priority than influence assigned to this determinant. It is

reasonable to expect that affluence predisposes individuals to view poor health as the outcome of poor people behaving poorly, and to be less supportive of income redistribution (and other progressive social policies) to reduce socioeconomic inequities. Thus, the relative affluence of the survey sample may account for the assignments of high influence for 'maintaining a healthy lifestyle' on health outcomes, and the low priority for 'income and social status'.

Surprising findings were the high influence and priority assignments to 'early childhood development' (ECD), especially given participants' perceptions of the poor position of municipalities to address this SDOH. While much of the policy debates concerning early childhood development in Canada have focussed on the federal and provincial levels of government (Friendly 2004; Taylor 2008), the vigorous work of the Human Early Learning Partnership to translate ECD research to municipal governments in Metro Vancouver was clearly instrumental in drawing these actors' attentions to the importance of ECD as a SDOH (Hertzman 2009). These findings also speak to the bearing that influential individuals and groups can wield in shaping municipal governments' priorities.

While assigned less influence and priority for action than several determinants, nearly half of participants' felt that municipal governments were best positioned to address the 'sense of community' SDOH. Meanwhile, 'hospitals & healthcare professionals' was assigned relatively high priority and influence, but was most often identified by participants as the determinant that municipalities were least able to address. For the remainder of the determinants,

predictable trends were observed with respect to the stakeholders identified as most responsible (e.g., provincial governments for determinants that fall under social services). Overall, these findings suggest that participants possess a complex (albeit individualistic) understanding of the multitude of factors that influence the health of local populations, the different stakeholders and their scopes of influence to address the diverse determinants, as well as the unique contributions that municipal governments can offer to the task.

6-2.3 Participants' Views on Roles of Municipalities in General

In addressing health inequities, participants felt that provincial governments, the federal government, and regional health authorities bear the greatest responsibility and influence, while the market bears the least responsibility and influence. While governmental bodies are perceived to be important arbiters of change, these findings conflict with participants' views that the most important determinant to address – 'maintaining a healthy lifestyle' – falls within the purview of individual responsibility, and the relatively moderate priority assignments they gave to determinants that fall within the jurisdictions of provincial and federal governments. These discrepancies suggest two trends in the data: the open-ended questions about responsibility for the SDOH generated more nuanced and complex responses from participants; and the closed-ended questions about relative responsibilities of specific sectors generated defensive, "knee-jerk" responses from participants, likely in response to concerns of fiscal imbalance (FCM 2006). This latter point is further supported by participants'

perceptions that insufficient provincial and federal funding were the biggest constraints to reducing health inequities at the local level.

Interesting responses emerged with regards to the priority assigned to various municipal policy levers to reduce health inequities. Across all municipal departments, participants assigned high priority to levers that represent politically desirable and feasible domains of intervention for health and well-being at the local level (i.e., 'parks & recreation' and 'community centers'), as well as to 'citizen engagement', perhaps reflecting mandates to ensure services are responsive to local needs. The low assignment to 'property taxes' was not surprising, given the resistance municipalities face from local residents in this domain (CBC 2008a). However, it is unclear why 'relations with businesses' was not considered influential, especially given the scope of influence of private developers in municipal governance (Low 2006).

Some interesting relationships between policy levers were also observed: support for 'libraries' was correlated with support for 'arts & culture programs'; 'parks & recreation programs' with 'community centers'; 'homelessness programs' with 'social housing' and 'addiction programs'; 'zoning laws' with 'bylaw enforcement'; and 'relations with businesses' with 'relations with non-profits'. These findings suggest that support for one initiative would likely correspond with support for another related initiative, offering promise for the development of integrated and coordinated service delivery that would more effectively address health inequities.

6-2.4 Existing Municipal Policies to Reduce Health Inequities

A minority of participants felt their municipality of employment assigned high priority to reducing health inequities, with responsibility for health issues falling almost squarely on two departments: parks, recreation, leisure, & community services; and planning & development. The high levels of responsibility assigned to these two departments mirror the policies and programs that were commonly identified as having potential to reduce health inequities (e.g., investments in recreation facilities, subsidies for fitness programs, affordable housing, and community revitalization initiatives).

The high priority assigned to parks & recreation departments is not surprising, given that 'maintaining a healthy lifestyle' was considered the most influential determinant and highest priority for action, and that investing in 'parks & recreation facilities' was considered the most influential policy lever for reducing health inequities. However, only moderate levels of influence were assigned to the 'income & social status' determinant, and the levers of 'social housing', 'neighbourhood safety' and 'addictions' which would fall under the purview of most planning & development departments. So while specific policies and programs from planning & development departments were commonly identified for reducing health inequities, participants' responses to other questions suggest scepticism about the relative impacts of such initiatives on health outcomes. It is also noteworthy that higher density municipalities were correlated with high priority for local health issues; perhaps socioeconomic inequities are steeper in higher density locales and greater visibility of poverty

(e.g., homelessness, addiction, etc.) creates stronger impetus for municipal intervention (Galea, Ahern et al. 2007).

6-2.5 Capacity for Municipal Intervention to Reduce Health Inequities

Participants who felt *municipalities* bear high levels of responsibility for reducing health inequities also felt that municipalities should intervene on a broad range of SDOH to improve health outcomes. In addition, regression analyses revealed that municipalities that assign high priority to reducing health inequities also recognize the importance of enlisting the help of the private sector (i.e., 'relations with businesses') and the local community (i.e., 'strong sense of community'). It is unclear however, how 'bylaw enforcement' would aid in reducing health inequities, especially when regressively employed to reduce 'civil disorder' (Vonn 2004; CBC 2006). Finally, a relatively high percentage share of park land tends to exist in the low to medium density municipalities (Table 2-1). Because lower density municipalities often[39] exhibit narrower and less visible social gradients, it is not surprising that municipalities with more park land are less likely to prioritize tackling health inequities.

6-2.6 Recap of Phase 2 Findings

The findings from the second phase of the research can be summarized as follows:

[39] Often, but not always, as in the case of Aldergrove, British Columbia, that is a lower density community with health inequities comparable to those observed in higher density municipalities (Hayes 2009).

- Overall response rates were as expected, although lower than expected from parks & recreation departments, and higher than expected from elected officials;
- There was general consensus among participants on the healthiest and least healthy neighbourhoods in their jurisdictions; understanding and attitudes towards the SDOH reflected individualistic conceptualizations of health, issues of local or regional concern, and perceptions of municipal capacity to intervene;
- Higher levels of government were overwhelmingly considered more influential and responsible for health inequities; traditional domains of municipal intervention were cited as influential policy levers, while congruence between support for similar policy levers was observed;
- Metro Vancouver municipalities generally did not prioritize reducing health inequities; the departments of parks & recreation and planning & development, and their associated policies and programs, were perceived to bear the most responsibility by participants; and
- Intervening on a range of SDOH, enlisting support from diverse stakeholders, and high density were all associated with assigning higher priority to reducing health inequities.

6-3 SUMMARY OF PHASE 3 FINDINGS: DOCUMENT ANALYSIS

6-3.1 Discussions of Health Concepts and Outcome Differences

Health and related concepts were minimally discussed in the OCPs. Passages that discussed 'health' or 'well-being' tended to be broader in scope (e.g., describing the connectedness between human well-being with environmental health), while 'disease' and 'illness' passages were more specific in scope (e.g., accessible infrastructure, special needs housing). According to the Ministry of Community Development, the OCP:

> …is a statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government. (Government of BC 2008)

On the basis of this definition, it is reasonable to see health and related concepts featured so infrequently in the OCPs. Yet, provisions by the Ministry of Community Development indicate that policy statements regarding "social needs, social well-being and social development" can also be included at the discretion of the municipality (Government of BC 2008). The findings suggest a disconnect between the prescriptions of OCP content by the British Columbia Ministry of Community Development and the actual contents of OCPs of some Metro Vancouver municipalities.

As with health concepts, discussions of outcome differences were minimal. When 'equity' or 'equality' was mentioned, it was primarily in the context of accessibility to services and facilities across the city. With the exception of a few references to gender equity/equality, the OCPs made no

references to socioeconomic inequities and resultant health inequities. It was surprising the extent to which these issues were ignored by the OCPs, especially in the City of Vancouver with its gross disparities between rich and poor (Rockel 2006), and the visibility of abject poverty in the Downtown Eastside (Christoff and Kalache 2007).

6-3.2 Discussions of SDOH

The determinants that featured most prominently in the OCPs were those pertaining to the physical environment (i.e., built and natural), social environment (i.e., social services and community characteristics), and healthy lifestyles, reflecting the primary domains over which municipal governments have some jurisdiction. That 'early childhood development' was one of the least featured determinants highlights the fact that, while this may be considered an important priority for intervention (phase 2 findings), it is not viewed as a primary responsibility of municipal governments.

The contexts of SDOH discussions that were common across the five OCPs fell within two general themes. The first theme focused on increasing, or improving upon, existing City-based services, programs, and facilities (i.e., protecting and maintaining status quo policies and programs). The second theme was to develop and implement new policies and programs that reflect the four priorities of the Livable Region Strategic Plan (LRSP) (GVRD 1996):

1) Protect the Green Zone
2) Build Complete Communities
3) Achieve a Compact Metropolitan Region
4) Increase Transportation Choice

Thus, development of new policies and programs appeared to be motivated more by concerns for managing the impacts of population growth and related expenditures, than concerns of the health and well-being of local residents. Additionally, while the Ministry of Community Development suggests that the consideration of the LRSP is optional in the OCPs (GVRD 1996), the OCP documents suggested otherwise:

> Under recent amendments to the Local Government Act, the City must now include a Regional Context Statement within its OCP if a regional growth strategy applies to all, or part of, the same area of a municipality as an Official Community Plan. This Regional Context Statement needs to identify the consistency between the OCP and the [LRSP] and be accepted by the GVRD Regional Board. (City of Burnaby 1998: paragraph 21)

Each municipality offered unique contexts for SDOH discussions in their OCPs, typically reflecting concerns and issues of local relevance. Themes emphasized in the City of New Westminster OCP were likely motivated by its low median household income levels compared to other Metro Vancouver municipalities (GVRD 2001a), as well as the detrimental impacts (environmental and social) of its geographical position as a major transportation corridor for the region. Richmond uniquely emphasized agricultural themes, which may reflect municipal priorities to increase its total land area for farming (Metro Vancouver 2006), while Surrey's unique focus on CPTED is likely driven by political concerns to reduce crime rates in that jurisdiction (CBC 2007).

6-3.3 Discussions of Interventions & Challenges

Not surprisingly, the most commonly discussed intervention for municipal governments was 'improve social, physical environment'. Unlike the others, this intervention most closely resembles the kind of activities (e.g., infrastructure improvements, public utilities, redevelopment, etc.) that municipalities are typically engaged in (Sancton 2000). In contrast, the minimal discussions of 'health promotion, education, strategies' likely reflect the fact that health-oriented interventions are the most divergent from traditional municipal activities; despite nearly nation-wide devolution of healthcare decision-making to the local level, the delivery of healthcare services across Canada continues to be the responsibility of provincial governments and regional health authorities (Lomas, Woods et al. 1997).

The contexts of many of the intervention passages were congruent with the principles of the LRSP, as demonstrated by the emphases on environmental stewardship and building complete communities (GVRD 1996). One recurrent theme that fell outside the scope of the LRSP was 'coordinated and comprehensive planning and service delivery'. The OCPs' emphases on this theme is particularly promising in terms of reducing health inequities because of the complex inter-relationships of the SDOH (Evans and Stoddart 1990), and the need to adopt inter-sectoral approaches to improve health outcomes (Lawrence 2002).

The challenges articulated in the OCPs were not novel or unique, but rather represent long-standing issues in Canadian municipal governance. The

OCPs' concerns about municipal fiscal imbalance (either from downloading of responsibilities or reductions in transfers from senior governments) reflect contemporary debates in municipal governance in Canada (FCM 2008a), while concerns about lack of municipal autonomy are rooted in the Canadian constitution dating back to 1867 (Sancton 2000). Similarly, concerns expressed in the OCPs' about how best to accommodate population growth is a nation-wide challenge (FCM 2005), and of growing importance amidst contemporary priorities for creating environmentally sustainable cities (FCM 2008b).

As with the findings for the SDOH passages, the OCP-specific themes reflected unique local concerns and issues. New Westminster was uniquely concerned about how well the Provincial government's social programs were meeting the needs of local residents, likely owing to the higher than average social assistance levels in that municipality (Westminster 1998; GVRD 2001a), while the City of Richmond was concerned more with ensuring the effectiveness and accountability of municipal services and facilities. These contrasting findings may be indicative of divergent visions of municipal governments' roles (i.e., stewards versus service providers), or of differences in inter-governmental relations between the Province and these two municipalities (i.e., adversarial versus amicable).

6-3.4 Recap of Phase 3 Findings

The findings from the third phase of the research can be summarized as follows:

- Health concepts were minimally discussed in the OCPs; discussions of equity or equality focused on ensuring accessibility to services and facilities across the City;
- The most commonly discussed determinants pertained to the physical or social environment, and to healthy lifestyles; SDOH passage themes reinforced maintaining status quo policies and programs and the principles of the LRSP; OCP-specific SDOH passages reflected local concerns and issues; and
- Improving the social and physical environment was the most commonly discussed municipal intervention; contexts of the intervention passages reflected the LRSP principles, and the need for integrated and comprehensive service delivery; challenges that were discussed mirror contemporary debates in Canadian municipal governance.

6-4 LINKS AND DEPARTURES BETWEEN RESEARCH COMPONENTS

6-4.1 Links

Discussing, Conceptualizing and Explaining Health

A key message that emerged from all three components of the research program was that, for the municipalities sampled in this study, reducing health inequities is not a priority. Municipalities were minimally featured in the health inequities literature, health was minimally featured in the municipal literature (OCPs), and most survey participants felt their municipality assigned low priority to reducing health inequities. That concerns of 'health inequities' and systems of 'municipal governance' are not coalescing in the Canadian context is particularly surprising given that Canada was the birthplace for the Healthy Cities movement (Hancock 1987; Hancock 1993), and that this movement has maintained its momentum in many European cities (Flynn 1996; Fulop and Elston 2000).

Another dimension of overlap was the manner in which health was conceptualized and explained. Individualistic explanations for health – health is determined primarily by lifestyle 'choices' and healthcare services – emerged from all three components. The health inequities literatures discussed PHPCS and HS more than any other SDOHs; survey participants perceived PHPCS and HS to be high priorities for action; and PHPCS was commonly profiled in the OCPs. Additionally, neutral discourses were primarily employed to describe differences in health outcomes in both the health inequities literature and the OCPs; the use of the more politically charged discourses of 'inequities',

'inequalities', and 'disparities' was generally avoided. Thus, academics and municipal policy-makers alike appear similarly inclined to conceptualize health and explain health differences individualistically and conservatively.

To varying degrees, environmental conceptualizations of health also emerged from all three phases. While the health inequities knowledge base as a whole tended to emphasize individualistic (i.e., behavioural and biomedical) conceptualizations of health, the abstracts that implicated municipal governments were much more likely to profile the environmental (both social and physical) determinants. Survey participants felt that clean air and water was the second most influential SDOH, and that municipalities were best positioned to address the strong sense of community determinant. And, in the OCPs, the social environment (i.e., social services and community characteristics) and the physical environment (i.e., built and natural environments) were the most commonly profiled determinants. Thus, while individualistic conceptualizations were generally dominant across all three phases, broader environmental perspectives were also prominent.

Prioritizing the Local

Tackling issues of local and regional concern generated attention in all three components. One of the municipal interventions identified in the literature – 'conduct health assessments, gather local data' – emphasized the importance of addressing problems of local concern and seeking local input. Survey respondents assigned high priority to addressing clean air & water and creating a strong sense of community – domains for which the regional and municipal

governments have jurisdiction and influence. Meanwhile, all of the OCPs adopted a regional vision for land-use planning by articulating strong support for the principles outlined in the LRSP, and the contexts of many passages reflected distinctly local concerns (e.g., poverty in New Westminster, protecting agriculture in Richmond, Surrey's reputation for crime). While such public accountability is a commendable objective for municipal governance in Canada, for a number of reasons, it is unlikely that many local citizens would identify 'health inequities' as an issue of concern that warrants attention by municipal governments.[40] In this respect, deference to local residents for setting priorities can be limiting.

Dimensions and Challenges of Intervention

Maintaining or improving the status quo (i.e., improving the social and physical environment) was one avenue for municipal intervention that emerged from all three phases; it was the most commonly discussed role in the OCPs (phase 3), the second most commonly prescribed role for municipalities (phase 1), and investing in parks & recreation facilities and community centers were identified as the highest priorities for intervention among survey participants (phase 2). The emphasis on status quo interventions may reflect resistance by municipal governments to take on responsibilities that fall outside of their jurisdictions. Developing or improving relationships with senior and other local governments to address local needs was also a common theme among all three

[40] They may not be aware of the extent of local health inequities, they may perceive municipalities to bear little influence on such issues, or they may feel such inequities are the products of 'poor people behaving poorly'. Considering the relative affluence of the survey sample, it is reasonable to assume that this latter perception might also be held by many of the politicians and senior-level staff in the Metro Vancouver municipalities.

phases. Taken together, these findings suggest that if municipal governments are compelled to work outside of their slated roles, then they are keen to develop relationships with other governments to support those ventures.

While the benefits of developing inter-governmental relationships were emphasized as potential avenues for municipal intervention on health inequities, the challenges associated with those relationships also received considerable attention. Concerns about insufficient federal and provincial funding, and increased offloading of responsibilities from senior governments onto municipalities, explicitly emerged in both the survey responses and OCPs, and were likely implicit in numerous responses and passages from these two phases. The findings from this research suggest that municipalities are willing and prepared to improve upon the responsibilities for which they are already slated, but are guarded with respect to responsibilities for which no clear steward exists.

6-4.2 Departures

There were a number of marked, thematic departures between the three components of the research program. First, while health-specific strategies and partnerships with the non-profit sector were given considerable attention in the health inequities literature, these interventions were assigned lower priority by survey participants, and were discussed in much lower proportions in the OCPs. This discrepancy suggests there are disconnects between what the academic literature is prescribing for municipal action, and the perceptions held by individual actors within, and stated intentions of, Metro Vancouver municipalities.

Another interesting divergence was with respect to ECD. Early childhood development was considered one of the most influential and greatest priorities for action by survey participants, yet this SDOH garnered little attention in the academic literatures or municipal government statements. The salience of ECD among municipal politicians and senior-level staff in Metro Vancouver not only suggests an awareness of ongoing research programs at the Vancouver-based Human Early Learning Partnership (HELP) (Broughton, Janssen et al. 2006; Kershaw, Irwin et al. 2006), but also that Metro Vancouver municipalities have been vigorously targeted for knowledge translation campaigns by HELP (Hertzman 2009). Additionally, these findings may reflect the tendency for ECD to act as a linchpin for debates on fiscal imbalance and offloading in Canada (St-Hilaire 2005; Government of Canada 2006).

Discrepancies were also observed in the context of assigning responsibility for reducing health inequities. The rhetoric from the academic literatures and the official policy statements from municipal governments reflected the need for inter-sectoral cooperation between municipal departments for the delivery of comprehensive and integrated municipal services. Yet the perceptions of municipal actors were that responsibility for health inequities fell overwhelming onto senior governments and only two departments within municipal governments. Either these messages – that municipalities and that every department within municipal governments bear some responsibility for reducing health inequities – are being inadequately disseminated or strongly resisted by influential municipal actors in Metro Vancouver.

The final point of departure between the three components was on the influence of the LRSP. Neither the academic literatures nor the responses from the survey gave any indication that the OCPs would be so firmly entrenched in the LRSP principles. These principles do not conflict with the SDOH framework or prescriptions for municipal intervention per se; indeed, a considerable amount has been written on how the SDOH and the environmental sustainability movement *can* be mutually reinforcing (Hancock 2001; Surjadi 2002; Schulz and Northridge 2004; Barton 2005). However, the underlying logics and motivations of the LRSP – reducing human impacts on the physical environment – differ from the focus espoused in the SDOH rhetoric of reducing health *inequities*. As it is often not an explicit priority, the redistributive potential of many sustainability-based interventions is unclear. For instance, locally-based initiatives that encourage walking or cycling to work would directly improve the health outcomes of those engaged in such behaviours; however, these initiatives are most likely to be taken up by individuals with the ways, means, and inclination to do so, thereby potentially exacerbating (or at least maintaining) existing health inequities. Thus, one cannot assume that health inequities would be reduced as a by-product of increased environmental sustainability. And, the lengthy time lag between implementation of such policies and manifestation of observable outcomes means that it could take a generation or two to even assess whether increased environmental sustainability did, in fact, reduce health inequities.

6-5 THEORETICAL REFLECTIONS

6-5.1 Political Economy

Acknowledgement of, and Explanations, for Socio-Spatial Health Inequities

Fundamental to the political economy perspective is the recognition of the inequitable production and distribution of surplus wealth across populations (Barnes 2000b). Acknowledgement of these inequities is the first step in understanding their creation, and in developing solutions to alleviate them. This research generated conflicting findings over whether municipal governments are prepared to acknowledge socio-spatial health inequities. On the one hand, individual actors within the municipalities were willing to and capable of identifying the healthiest and least healthy neighbourhoods in their jurisdictions, and there was a large degree of agreement about these inequities between actors in the same jurisdiction. On the other hand, the municipalities' official planning statements steered clear of identifying specific neighbourhoods in need, or of an inequities discourse in general. The ease with which individual actors, as opposed to the municipal institutions, acknowledged socio-spatial health inequities is likely related to how these actors explained the causes of inequities.

According to the majority of municipal actors that participated in the survey, the most influential determinant of socio-spatial health inequities in their jurisdiction was 'healthy lifestyles'. So, while municipal actors acknowledged that inequities existed, they also believed that these inequities were the products of people leading unhealthy lifestyles, and not of an inequitable distribution of

surplus wealth by government or other social institutions. Indeed, in the context of developing solutions to reduce health inequities, municipal actors felt that improving lifestyles was the single greatest priority for action. If the municipal governments as institutions (vis-à-vis their OCPs) would not acknowledge the existence of socio-spatial health inequities, and if influential actors within these governments perceive health inequities as *individual* problems, then it is not surprising that solutions for reducing health inequities at the institutional level were not clearly articulated.

Redistributive Functions of the Municipal Governments

One mechanism to reduce socio-spatial health inequities in cities is through the redistributive functions of municipal governments (e.g., property taxes, affordable housing, public transit, etc.). The findings from the first phase of the research generated a number of prescriptions for municipalities in reducing health inequities, and some of those prescriptions have the *potential* to be redistributive in scope (e.g., investing in the social and physical environment). However, like the OCPs, a majority of the abstracts avoided an inequities discourse, making it difficult to ascertain whether the objectives of the prescribed interventions were, in fact, to reduce inequities. For example, whilst improvements in park infrastructure or advertising for prenatal programs may be welcomed by some local residents, these types of interventions could exacerbate socio-spatial inequities if they disproportionately benefit already well-served neighbourhoods or women with low-risk pregnancies, respectively. Thus, reducing socio-spatial inequities not only requires engaging municipalities, but

also communicating prescriptions with clear, redistributive objectives and potential.

In addition to unclear prescriptions for redistribution, this research presents conflicting findings on whether the municipal governments examined were receptive to engaging in redistributive functions. The survey findings revealed that municipal actors placed high priority on investments in various aspects of the 'public good', including parks and recreation, community centers, and affordable housing. However, the low priority they placed on increasing property taxes, and the low levels of responsibility and influence they assigned to municipal governments in reducing health inequities, suggests that these actors perceive institutions other than municipal governments to be the agents of redistribution. Similarly, the OCPs commonly discussed the need for municipal government investments with redistributive potential (e.g., increasing public transit, provision of social services, affordable housing), but the principles of the LRSP were the primary motivators of these discussions – principles that do not explicitly prioritize reducing socio-spatial inequities.

Roles of Municipal Government in Reducing Socio-Spatial Inequities

Explicitly or otherwise, municipal governments *can* reduce socio-spatial health inequities if they redistribute public resources in a more equitable manner. Whether these redistributive acts take place, however, is contingent upon the approach to urban governance adopted by municipalities (Harvey 2001). According to Harvey (2001), urban governments are increasingly shifting from 'managerialism' (i.e., delivering on their slated responsibilities), to

'entrepreneurialism', by protecting threatened local economies and promoting the development of new enterprises. Unless emerging enterprises had a clear commitment to reducing health inequities, it seems that the 'managerialism' approach to urban governance offers a clearer mandate for redistribution of resources. In this research, the findings from the OCP analysis lend support to Harvey's theory; while there was deference to managerialism (e.g., strong support for investments in public services and infrastructure), the municipalities' commitment to implementing the principles of the LRSP would require considerable entrepreneurial effort and initiative by these governments (e.g., encouraging new approaches to development, offering incentives for the establishment of new local businesses, etc.).

Lack of autonomy, especially for municipalities adopting a managerial approach to governance, is one of the biggest challenges confronted by municipal governments in reducing health inequities (Clark and Dear 1984). As a non-autonomous instrument of provincial governments (Clark and Dear 1984), municipalities in Canada have limited capacity or authority to deliver services and programs that fall outside their purview (Sancton 2000). Municipalities employing an entrepreneurial approach would be less burdened by lack of institutional autonomy, but the underlying market orientation of this governance model limits their capacity to stimulate redistributive initiatives to reduce health inequities.

6-5.2 Power

Power over Others

One way to redistribute resources for the reduction of health inequities is through the assertion of power. As operationally legitimate yet constitutionally unrecognized government institutions, municipal governments in Canada are the objects and subjects of power. In negotiating these two positions, municipalities reduce socio-spatial health inequities at the local level by asserting their political and jurisdictional power over local residents, while fulfilling constitutional obligations to execute policies of senior governments.

In terms of being the objects of power, municipal governments can address socio-spatial health inequities through a range of policies and programs including increasing property taxes and bylaw enforcement to generate revenue; zoning restrictions to create healthier built environments; or legislating that a minimum number of non-market housing units be stipulated in developers' permit applications. As subjects of power, socio-spatial health inequities can be reduced through the devolution of responsibilities from provincial to municipal governments for social and health services planning, thereby ensuring services are more responsive to local needs (Lomas, Woods et al. 1997; City of Burnaby 1998). While the latter approach has often been criticized as offloading of responsibilities (St-Hilaire 2005), municipalities are uniquely positioned to be familiar with, and aware of how best to respond to, health and social concerns at the local level.

Power as Capacity to Act

Rather than being the product of unequal relationships, power can also be viewed as a shared resource, or an essence that influences one's capacity to act (Ledyaev 1997). Municipal governments can invoke power as an instrument of common will, for example, by working in partnership with other governments, non-profit agencies, local businesses, and engaged citizens who are concerned about local health inequities. The municipalities explored in this research were especially keen on working with the Provincial government to ensure that services are meeting local needs, and on consulting with residents to identify and address local problems.

Municipal governments' capacity to reduce health inequities can be threatened when power is entrenched in expert knowledge (Ledyaev 1997). Survey participants indicated concern about the lack of expert knowledge on health issues within their governmental institutions, while the OCPs paid little attention to health-focused interventions that would require institutional knowledge and capacity on health issues. Indeed, one of the prescribed interventions – health impact assessments – has received criticism for relying too much on 'expert' knowledge and too little on the contextual knowledge of affected residents (Mittelmark 2001).

6-5.3 Public Policy and Urban Planning

Public Policy Cycle for Addressing Local Health Inequities

Despite the problematic assumptions of rationality (Stone 2002), Howlett and Ramesh's (2003) policy cycle model offers utility for understanding the

elements of the policy process. Agenda-setting is one element of this process, and refers to the process by which an issue moves from salience among various stakeholders to the policy table (Kingdon 1995; Soroka 2002). While the findings from this research suggest that socio-spatial health inequities may have some salience among important policy actors within municipal governments (i.e., congruence in identifying healthiest and least healthy neighbourhoods), there was little indication that the issue of health inequities would make it onto the policy agenda of municipal governments.

According to the cyclical model, once an issue becomes part of the policy agenda, the development of policy solutions and alternatives takes place (Howlett and Ramesh 2003). Although the issue of 'health inequities' is unlikely to set the municipal policy agenda, redistributive policies can reduce inequities. The findings from this research suggest that policies on redistribution would be shaped and potentially constrained by other municipal concerns, such as efficiency in municipal government spending, minimizing property tax increases, managing population growth, ensuring a balance of local jobs with residents, and attracting new sources of local employment.

While a number of models exist to explain the decision-making stage of the policy cycle (Kingdon 1995), the incrementalism model offers the greatest purchase for understanding decision-making processes in Canadian municipalities (Lindblom 1956). Incrementalism, which refers to the adoption of policies that make only incremental or marginal changes to current policies or programs, is often explained by the inherent conservatism of policy-makers

(Kingdon 1995); policy-makers are concerned about political fallout or economic uncertainty of large-scale decisions, and thus set more achievable policy goals that offer little variation from the status quo. In this case, an incrementalist approach is likely employed by municipal governments because of concern about political fallout (i.e., resistance to raising property taxes), as well as their lack of institutional autonomy to adopt truly reformist policies.

Implementation of policy decisions, typically manifested through planning activities, requires the use of policy tools (Schneider and Ingram 1990). The municipalities in this research employ a number of policy tools, including authority tools (e.g., zoning and building regulations, bylaws), incentive tools (e.g., fitness subsidies, parking fines), capacity tools (e.g., information initiatives on energy and water conservation), and hortatory tools (e.g., employing 'green technologies' in municipal operations, encouraging private employers to offer transit passes and end-of-trip cycling facilities) (Schneider and Ingram 1990).

The final stage of the policy cycle, evaluation, refers to the process by which policy-makers monitor the implemented policy or program to ensure it is meeting its stated goals and objectives. The municipal governments demonstrated some interest in evaluating municipal policies, by monitoring indicators of population size and job growth, for example. However, the municipalities generally focused more on the importance of monitoring the effectiveness of programs and services provided by other organizations or institutions, especially the Provincial government, on meeting the needs of local residents.

Planning Tradition for Addressing Health Inequities

With its focus on the principles of democracy, human rights, and social justice (Friedmann 1987), the social reform tradition of planning underpins much of the 'healthy urban planning' literature (Barton and Tsourou 2000). According to Friedmann (1987), achieving the principles of the social reform tradition requires the promoting of economic growth, full employment, and the redistribution of income. While the OCPs afforded considerable discussion to promoting economic growth and increasing local employment opportunities, there was no explicit discussion of income redistribution. Additionally, survey participants assigned low priority to addressing the income determinant. Thus, it appears unlikely that the municipalities ascribe to the social reform tradition of planning.

6-6 LIMITATIONS

6-6.1 General Limitations of the Research Program

The issue of temporality presents a significant challenge to the overall research program. As described in section 2-1.2, each component of the research program collected data that were generated at different points in time. While the data collected in the first and second phases followed a temporal pattern (i.e., literature review spanned 1986 to 2006 and survey was conducted in 2007), the OCPs analyzed in the third phase of the study were all written in the late 1990s. Municipalities' statements of intention to address health and social issues of local concern preceded much of the academic literature (and potential prescriptions for municipal intervention) as well as the articulation, and likely formulation, of survey participants' opinions regarding municipal roles and responsibilities for addressing health inequities. Thus, it is difficult to infer the extent to which the academic literature, and prescriptions therein, could have shaped the contents of the OCPs, as well as the relationships between current municipal government actors' opinions and institutional statements of municipal intention that predate those opinions by a decade or more. Had the OCPs been published in 2006, stronger inferences could have been made about the extent to which the health inequities knowledge base permeated community planning visions in Metro Vancouver, because much of the literature would have been available at that point for consultation by the municipalities' planning departments. Additionally, OCPs published in 2006 would likely have been developed by individuals that participated in the survey, thereby increasing the

likelihood that the contents of the OCPs were shaped by the views and attitudes held by individuals actively working in the municipal government.

Another limitation of the research program was the variation in spatial focus across program components. The first phase of the research reviewed literature produced from around the world (although abstracts of Canadian origin were prioritized for retrieval), while the geographical scopes for the second and third phases of the research were Metro Vancouver municipalities. Although the prescriptions that emerged from the first phase guided data collection and analyses of the subsequent phases of the study, it is unclear just how relevant or applicable the prescriptions from other countries (and even other provinces within Canada) are to the jurisdictional contexts and daily operations of Metro Vancouver municipalities. Not only do municipalities' jurisdictional responsibilities vary considerably around the world, so too varies the health and social issues of most pressing local concern between cities. These diverse contexts present challenges to understanding how the prescriptions for municipal intervention that arose from the geographically diverse academic literature truly shaped the intentions of Canadian municipalities to tackle socio-spatial health inequities. That each role was summarized and analytically conceptualized in broad terms, and that abstracts of Canadian origin implicated municipalities in each of the seven role categories, reduced the overall impact of this limitation.

6-6.2 Literature Review Limitations

There were a few limitations with respect to the literature search process. Because of its geographical focus, the initial intent was to include the Geobase

database in the literature review phase. However, due to technical difficulties (i.e., unable to view records beyond the first 25), this database had to be excluded. It is likely, however, that any relevant articles from Geobase would have been retrieved in one of the remaining three databases.

Another weakness in the first phase was in treating the four bodies of literature as discrete and mutually exclusive entities. As discussed (section 1-1.3), these bodies of literature co-developed, and as with most academic disciplines with diverse perspectives, they rely on the same baseline information. As such, numerous abstracts that were retrieved were categorized into multiple bodies of literature. This limitation of over-coding was overcome by ensuring that repeat abstracts were counted and coded for each body of literature in which they appeared, thereby ensuring that no single body of literature was over- or under-represented.

Not having a second reviewer and not reviewing entire articles presented analytical weaknesses in this phase of research. A second reviewer would have been beneficial for confirming the validity and reliability of the codebook. However, with over 1600 abstract hits, and 1000 included, enlisting the assistance of another reviewer was simply not feasible. Reviewing only article abstracts was problematic for a number of reasons: they typically provide only cursory information; the information requirements for abstracts vary considerably across journals; it was often impossible to know the article type; and many relevant articles would have been excluded because they did not have abstracts. While reviewing entire articles would have generated more accurate findings, the

scope of the literature review would have necessarily been smaller. Reviewing and coding a small sample of full-text articles was feasible, however, and could have confirmed the overall validity of the abstract codebook. Ultimately, the more cursory approach of reviewing abstracts was the best way to assess how this large and diverse body of knowledge has implicated municipal governments in reducing health inequities over a twenty year timeframe.

6-6.3 Survey Limitations

Most of the challenges and limitations in the second phase of the research arose from the sampling process. First, while the names of mayors, city councillors, and major departmental heads were readily available, the availability of names of the other position types – departmental managers, program managers, program coordinators, etc. – varied considerably across municipalities. Some municipalities were highly transparent, providing a comprehensive and up-to-date list of all municipal staff names and contact information (e.g., Maple Ridge, Vancouver); others offered only names of departmental heads (e.g., Langley, Pitt Meadows); while others offered very few names and no direct contact information whatsoever (e.g., Port Moody). Overcoming this limitation required conducting additional research on the municipalities with less readily available information, as well as contacting the information departments within each municipal government to ensure that the data retrieved was accurate.

Another challenge was encountered when contacting these information departments. Some information contacts were less compliant than others, and

demanded to see the survey and acquire official approval before updating the contact list (e.g., Township of Langley). Once the survey was provided, however, these contacts became very cooperative. Other information contacts did not respond, making some municipality contact lists substantially less accurate (and more prone to non-response bias) than others. It is noteworthy that the information contacts that were the least accommodating of this request were also from the municipalities with the lowest response rates (e.g., City of Port Moody).

Another limitation with the sampling process was the lack of consistency across municipalities in the names and key functions of their departments and positions. For example, most municipalities separated 'Parks & Recreation' from 'Engineering', while a few combined these functions into one department. Similarly, 'Human Resources' was its own department in some municipalities, and a branch of 'Corporate Services' in others. Lack of consistency in position titles was also problematic, but inter-municipal equivalencies were easily deduced (e.g., departmental director versus departmental general manager). While these discrepancies presented challenges in creating the sampling framework, they did not influence the survey analysis; partially closed-ended questions were posed for both the department and position, thereby facilitating an accurate, yet standardized, account of the participants' occupational identities.

6-6.4 OCP Analysis Limitations

A number of limitations were present in the third phase of the research. First, as municipalities need not apply a standard format for their OCPs, there was considerable variation between the five OCPs. Some OCPs were highly

repetitive, while others were more succinct in style. Highly repetitive passages were problematic as they led to higher coding frequencies. Repetitive passages, however, occurred across all coded themes, making it unlikely that any individual theme was over-represented or over-counted. Interestingly, Vancouver's OCP was the most repetitive in content, and it had the lowest overall frequencies for all coded items, suggesting that over-coding was a non-issue. Regardless, the contexts of the coded passages, rather than the number of passages, were of primary interest in this phase of the research.

Another limitation in this phase was the use of different strategies for coding the OCPs. The first two OCPs were coded using a more inductive approach (immersion and crystallization), while the remaining three OCPs were coded deductively after employing keyword searches. The weakness with this approach was the reliance on the first two OCPs for generating a keyword list that would comprehensively extract relevant passages in the remaining three OCPs; that is, it was possible that relevant passages were overlooked in the latter three OCPs. The strength of this approach, however, was that the list of keywords that was developed emerged inductively from already coded passages, and that the list facilitated a standardized coding process. Thus, while standardization may have been less comprehensive, it ensured that all five documents were treated in an analytically comparable manner.

The long-term trajectories, as well as the date of publication, of the OCPs presented another challenge. OCPs are designed to provide long-term vision statements and plans for the municipality, and as such, maintain their relevance

over time by avoiding use of specific details or citing research evidence. The OCPs examined here were developed in the 1990s, and presented 15 to 20 year timelines for their vision statements. Given the objectives of OCPs in general, and the timeframe in which the documents were examined in this research, it may have been unreasonable to expect any of these documents to make reference to evidence or concepts from the four health inequities literatures reviewed in phase one. However, ideas from the environmental sustainability movement were clearly influential in the OCPs, as evidenced by their attention to the LRSP principles. Thus, it *was* reasonable to expect that broad concepts from the health inequities knowledge base – or the Healthy Cities movement at the very least, given its historical engagement with municipal governments – could have shaped the vision statements and principles articulated in these documents.

Finally, it is worth acknowledging that discussion of health inequities issues in the OCPs did not necessarily come from direct exposure to the health inequities knowledge base (i.e., correlation does not equal causation). There are a multitude of influences that shape whether an issue or idea gains salience among policy makers and sets the policy agenda (Soroka 2002), but, more often than not, the existence of research evidence tends to be a weak overall influence (Lavis 2002; Lavis, Posada et al. 2004). In the case of this study, it seems most likely that the academic ideas in the health inequities knowledge base would have reached some critical threshold of salience among policy makers in senior governments (FPT-ACPH 1996; Health Canada 2001), and these ideas would have trickled down to municipal policy discourse (Jones 2002).

6-7 POLICY IMPLICATIONS: PRESCRIPTIONS, CAPACITIES, AND INTENTIONS

6-7.1 Prescriptions for Municipal Intervention

Overall, the health inequities knowledge base offered unsatisfactory guidance to municipal governments in developing healthy public policy at the local level. Health was conceptualized in primarily behavioural and biomedical terms, especially from the HP and HC literatures that emerged in the years predating publication of the OCPs, providing little incentive for municipalities to consider, and act on, the full range of the SDOHs. If researchers, who have at their disposal voluminous evidence on the social determinants of health inequities, overwhelming defer to healthy lifestyles and healthcare services as the levers for improving health, then how can busy, and often uninformed, policy-makers be expected to conceptualize health any differently?

The relative silence of the health inequities knowledge base on avenues for municipal action presents another challenge to developing healthy public policy in Canadian municipalities. With less than one-fifth of the abstracts implicating municipalities in any way, and the tendency for those implications to originate from Europe, it is clear that Canadian health inequities researchers offer inadequate prescriptions for municipal policy-makers to draw from (Lavis, Robertson et al. 2003). Even if prescriptions *were* readily available, municipal policy-makers would justifiably have little faith in the effectiveness of such prescriptions, given the dearth of evaluations of programs targeting health inequities (Baker, Metzler et al. 2005). At a minimum, though, paradigm shifts

are needed in *both* the academic and policy domains to move the issue of population health inequities onto the municipal government agenda in Canada.

The congruence and incongruence between prescriptions from the literature and intended interventions described in the OCPs provide indications of likely avenues for intervention on health inequities at the municipal level. Based on their emphasis in the municipal policy documents, the prescriptions of 'improving social and physical environment' and developing relationships with other governments are the levers that municipalities are most likely to employ in reducing health inequities. Meanwhile, the incongruence between the literature and the OCPs for health interventions and relationships with the non-profit sector suggests that municipalities are less likely to intervene in these domains. If these less popular interventions are effective, then the onus is on academics to demonstrate their effectiveness to municipal policy-makers. As advocated by others (Quigley and Taylor 2004; Baum 2005; O'Neill and Simard 2006), conducting evaluations of programs with proven impacts, and disseminating these findings to municipal policy-makers could facilitate greater uptake of these less traditional prescriptions.

6-7.2 Capacities of Municipal Governments for Intervention

The findings from the second phase of the research offer conflicting assessments of the capacities of municipalities in Metro Vancouver to intervene on health inequities. Indicative of a low capacity to intervene, survey participants defined health in individualistic terms, and perceived traditional policy levers (i.e., parks & recreation facilities) to bear the greatest positive influence on health at

the local level. Despite recent dissension on the lack of individualistic perspectives in health inequities discourse (Forde and Raine 2008), and evidence of the redistributive capacity of increased green space (Mitchell and Popham 2008), there is general consensus among researchers in the area for a decreased focus on individualistic-approaches to health policy, and for increased investments in the social safety net as a whole (Coburn 1999; Dunn and Hayes 1999; Navarro 1999; Lundberg, Yngwe et al. 2008).

One resounding message from the survey findings was that Metro Vancouver municipalities are not empowered to reduce health inequities. Participants clearly articulated their perceptions that municipalities bear low levels of influence and responsibility, and assign low priority, for reducing health inequities, and that they are highly constrained by insufficient funding from senior governments. These perceptions of low autonomy, coupled with strong aversions to increasing revenue (i.e., property taxes) demonstrate a low capacity for municipal intervention. Health inequities researchers have been attentive to the issue of empowerment at the individual (Wallerstein 2002) and community levels (Flynn, Ray et al. 1994; Hancock, Labonte et al. 1999; Laverack and Labonte 2000), but the challenges of disempowerment among municipal governments in Canada have been overlooked.

Despite narrow understandings of the SDOH and lack of empowerment to act on health inequities, a number of survey findings suggest municipalities *do* possess some capacity to intervene on health inequities. The good response rates for the survey demonstrate a willingness of these influential municipal

actors to engage on the issue of health inequities, even if they feel limited in their ability to act on them. Bringing key actors to the table is the crucial, and essential, first step in developing evidence-based policy (Lavis, Robertson et al. 2003).

Another indication of capacity to intervene was the high degree of congruence between participants in the same jurisdiction in identifying the healthiest and least healthy neighbourhoods. The first step in the development of public policy – problem identification or agenda-setting – can generate considerable conflict, often arresting the policy cycle at the outset (Soroka 2002; Howlett and Ramesh 2003). The findings suggest minimal conflict would arise among municipal actors in identifying need in abstract terms. However, it remains to be seen whether such conflict would be minimal once need is associated with specific programmes and inter-governmental funding arrangements. For instance, there may be little disagreement among City of Vancouver staff and politicians that Vancouver's Downtown Eastside is the neediest neighbourhood in Vancouver; but the scope of need in this neighbourhood (Christoff and Kalache 2007), the seeming imperviousness of this need to resource provision (Carrigg 2009), and the existence of numerous other needy neighbourhoods in Vancouver, can paralyze efforts to develop and implement viable policy solutions to tackle problems in the Downtown Eastside. Thus, capacity for intervention may be high when conceptualizing inequities in abstract terms, but is likely to be threatened by the increased specificity required

in subsequent stages of the policy cycle, involving the development and implementation of policy solutions.

Capacity to intervene was further demonstrated by the extensive and diverse list of municipal policies and programs that participants felt could reduce local health inequities. Ranging from affordable housing, to drug policy, to fitness subsidies, when asked about specific municipal actions, these actors clearly demonstrated a complex understanding of health and an awareness of the diversity of the health determinants. Additionally, while only a minority of participants felt their municipality assigned high priority to reducing health inequities, those that did were also more likely to assign high priority to address *multiple* SDOHs. Implementing a range of public programs that simultaneously target multiple SDOHs mirrors academic calls for comprehensive, coordinated and intersectoral action to most effectively reduce health inequities (Nutbeam 1999; Lawrence 2002; Krieger, Northridge et al. 2003).

6-7.3 Intentions of Municipalities to Reduce Health Inequities

Whilst none of the OCPs made any direct statements about reducing health inequities at the local level, discussions of the municipal interventions that were prescribed in the literature were taken as implicit statements of intent to address health inequities. As such, the findings from the third phase of the research provided some clear statements of what selected Metro Vancouver municipalities intend, and do not intend, to do to address local health inequities.

The clearest statements of intention from the OCPs were to improve the local social and physical environment through existing municipal services,

programs, and facilities, and to develop necessary relationships for tackling issues that fall outside municipalities' traditional jurisdiction. Another strong statement of intent, albeit not one that would *necessarily* reduce health inequities, was to manage population growth in keeping with the LRSP principles. Thus, the municipalities primarily intend to maintain the status quo with respect to municipal services (i.e., not develop new policies and programs), to accept and accommodate the agendas of senior governments for local and regional land-use planning, and to only become involved in reformist initiatives when they are supported by other governmental bodies.

A less conservative intention that was articulated in the OCPs was a strong interest and willingness to engage with residents to identify and address local problems. While such engagement is not the equivalent of health impact assessments, it does signal a desire among the municipalities to gather local data and ensure that the services they are providing are responsive to local needs. Beyond concerns about engagement being mere tokenism (Arnstein 1969), deference to local citizens is unlikely to ensure that the issue of health inequities makes it to the municipal policy table, especially given empirical research that has shown a lack of public awareness of the SDOH (Reutter, Neufeld et al. 1999; CIHI 2005; Collins, Abelson et al. 2007).

Relative to intentions to work with other governments, the municipalities did not demonstrate strong intentions to work with the local non-profit sector. These findings were surprising given academics' attention to the role of the non-profit sector in tackling health inequities (Clavel, Pitt et al. 1997; Clark 2000;

Hancock 2001; Wallerstein 2002), and the reliance on this sector for the delivery of social services in Canada (Health Canada 2003). Given the municipalities' lack of intention to lead, or become involved in, health-based interventions, these municipalities may not see tremendous need to engage local health and social service providers, and accordingly, to shift from top-down models of government to bottom-up models of governance (Laverack and Labonte 2000).

6-8 FUTURE RESEARCH DIRECTIONS

The findings from this dissertation illuminate a number of potential avenues for future research. Given its explicit 'city' focus, it was not surprising that the Healthy Cities literature implicated municipal governments in the greatest proportion. It was less intuitive however, that much of these implications emerged from the European Healthy Cities movement. One might have expected to see more implications from the Canadian Healthy Cities literature, especially considering the role that Canadian scholars played in launching the movement. Why is this movement more prominent in Europe than North American? Do European cities have more power to implement prescriptions from the Healthy Cities movement, and if so, what are these powers? And, is the implementation of these prescriptions in Europe corresponding with reductions in health inequities? Investigating these cross-jurisdictional differences could help to explain the lack of action on health inequities at the local level in Canada.

Another area that requires further investigation is whether and how municipal governments operationalize the long-term ideas articulated in their OCPs. What kinds of obligations do municipal governments have to uphold these statements of intention, and what kind of accountability mechanisms are in place to ensure these obligations are met? And, what do the planning departments do in these municipalities to ensure these statements reflect current priorities, as well as the prevailing economic and social climates? Investigating these questions would shed light on the overall importance of OCPs and related policy documents, in setting priorities and guiding actions at the municipal level.

OCPs may do little to guide municipal governments' activities, because of the rapidly changing nature of municipal priorities. For example, homelessness in Vancouver's Downtown Eastside has a relatively long history, certainly predating publication of the Vancouver CityPlan that was analyzed here (Hasson and Ley 1994). Yet, eliminating homelessness in Vancouver has only recently become a high municipal priority, with a newly elected mayor in November 2008 (CBC 2008b). By hiring a city manager with compatible attitudes and relevant expertise on the issues (Rolfsen 2008), the new mayor started implementing his vision within months of becoming elected (Paulsen 2009). This example highlights the power that individuals can wield in shifting municipal priorities and the unpredictability of such shifts, and questions the extent to which municipal governments should be obliged to implement the priorities of OCPs.

The compatibility of action on health inequities and environmental sustainability is also unclear. As mandated by the Government of British Columbia, the municipalities investigated in this study presented municipal growth strategies that employed principles of environmental sustainability. Municipalities that employ such principles demonstrate an ability to contemplate objectives with long-term (i.e., 10-20 year) trajectories. If the SDOH are addressed in the process of increasing environmental sustainability, then it is possible that health inequities could be reduced in the process. Thus, future research could investigate the extent to which growth strategies, such as that developed by Metro Vancouver (Metro Vancouver 2009), have the potential to reduce health inequities.

6-9 CONCLUSIONS

The fundamental influence that municipal governments have on creating, and potentially reducing, socio-spatial health inequities in cities is well established. The early links in the 19th century between urban planners and public health practitioners facilitated dramatic improvements in the living conditions of city dwellers in the developed world, and set the stage for considerable improvements in longevity over the next century. And, after decades of silence, the importance of our daily living conditions – conditions that are so fundamentally shaped by municipal government policies – has re-emerged within the field of public health as a key determinant of the health of populations. Yet, despite the discursive shift in public health, and the establishment of several academic disciplines examining health inequities in varying capacities since this shift, the precise roles and responsibilities of municipal governments in reducing health inequities at the local level have been inadequately investigated and remain poorly understood.

The findings from this research program provide informative analyses on the prescriptions, capacities, and intentions of municipalities to address local health inequities in an urban region of Canada. In terms of prescriptions, this research suggests that municipalities have received limited attention from the scholarly domain (especially from relevant Canadian literature). When prescriptions did emerge from the academic literature, they tended to either lack sufficient specificity to be of utility to Canadian municipalities, or were too specific to geographical contexts outside of Canada (and thus irrelevant to Canadian

municipalities). Thus, it may be unreasonable to expect Canadian municipalities to glean useful insights from the relatively sparse prescriptions that have been made in the academic literature, as well as unrealistic to assume that these limited prescriptions bear relevance to their jurisdictional contexts and local health concerns.

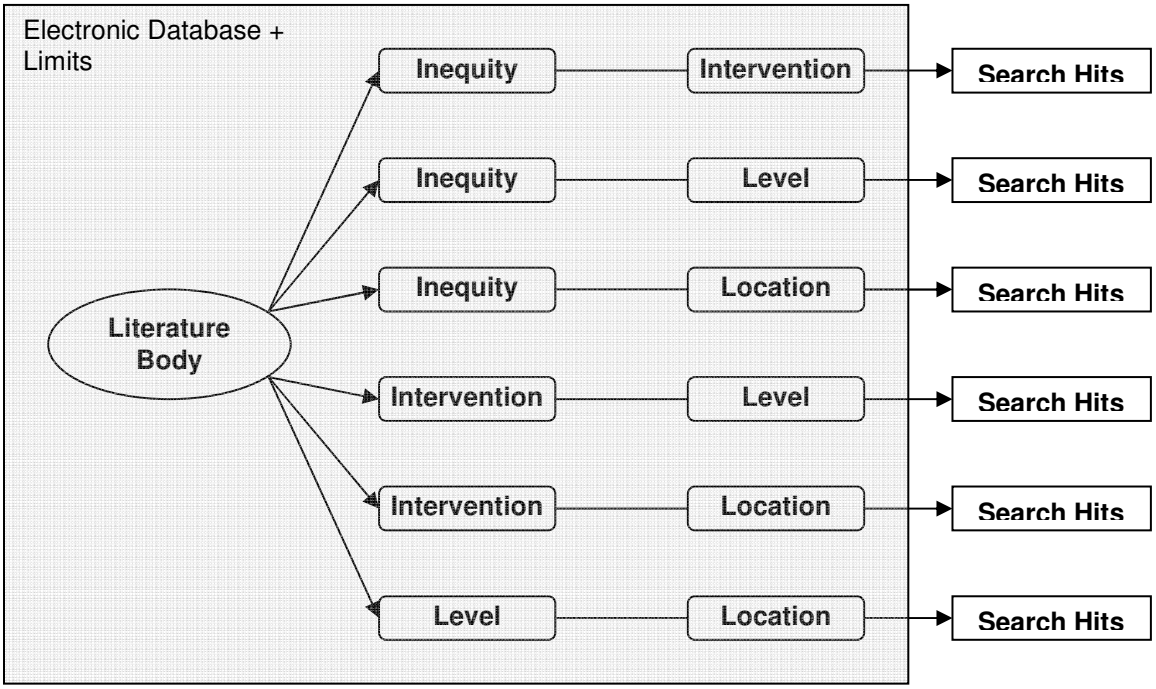
While some findings from the second phase of the study suggest Metro Vancouver municipalities *have* the capacity to address health inequities, this capacity is threatened by the individualistic views held by influential municipal actors towards the SDOH and the relative responsibility of municipal governments to tackle health inequities. Any one individual may not bear tremendous influence within these relatively large government institutions. However, the homogeneity of these attitudes across municipalities, departments, and positions warrants pause, as they are suggestive of a deeper culture within Metro Vancouver municipalities that is generally resistant to consideration of health inequities. This inference is supported by the municipalities' statements of intention, in which no considerable articulations of interest were made in moving beyond their slated mandates to tackle health inequities at the local level.

These study findings contribute to the growing body of research on the challenges to translating the health inequities knowledge base into healthy public policy to reduce population health inequities. To date, much of the analyses of the policy-related challenges in Canada have focused on the organization of responsibilities into sectoral silos in senior governments. In contrast, this research program highlights the unique challenges faced at the municipal level of

policy-making; challenges that relate more to the lack of constitutional authority and autonomy of municipal governments in Canada and the ensuing culture of resistance (or outright hostility) to engaging in activities that fall outside their purview. To truly reinvigorate the link between public health and urban planning in Canada, more critical perspectives are needed on what constitutes effective knowledge translation to municipal governments on health inequities, as well as the cultural and practical challenges to municipal intervention on these issues.

APPENDICES

APPENDIX 1: LITERATURE SEARCH STRATEGY



Literature body search terms → "health promotion"; "healthy cities" OR "healthy communities"; "population health"; "urban health"

Health inequity search terms → inequality OR inequalities OR "health inequality" OR "health inequalities" OR inequity OR inequities OR "health inequity" OR "health inequities" OR disparity OR disparities OR "health disparity" OR "health disparities" OR determinants OR "health determinants" OR gradient

Government intervention search terms → policy OR plan OR planning OR program OR regulation OR legislation OR law OR legal OR intervention

Government level search terms → municipal OR municipality OR municipalities OR "municipal government" OR "local government" OR "local state"

Geographical location search terms → Canada OR "Nova Scotia" OR "Prince Edward Island" OR "New Brunswick" OR Newfoundland OR Quebec OR Ontario OR Manitoba OR Saskatchewan OR Alberta OR "British Columbia" OR Halifax OR Montreal OR Ottawa OR Toronto OR Hamilton OR Winnipeg OR Saskatoon OR Edmonton OR Calgary OR Vancouver

APPENDIX 2: ABSTRACT CODEBOOK

	Variable Name	Codes
Bibliographic Variables	Body of Literature	HP, HC, PH, UH
	Journal Name	(String variable)
	Publication Date	Year
	Geographical Origin	Global, transcontinental
		Canada
		Europe
		Australia, New Zealand, Oceania
		Asia, Africa, Middle East
		Central, South America, Mexico
		United States
	Study Type	Population-Based Survey
		Experimental, Quasi-Experimental
		Program Evaluation/Description
		Case Study, Qualitative, Mixed-Methods
		Review (Systematic, Conceptual)
		Commentary
	Study Population or Target Audience	Adults (all ages) Children (under 18) Working age adults (18-64) Older adults (elderly, seniors, retired) Women Minorities (visible, sexual, immigrants, refugees, etc.) Practitioners (health, social services, teachers, etc.) Researchers Governments Disabled Unspecified Other (e.g., poor, lone parents, rural dwellers, prisoners, business owners)
Search	Inequality &	Yes/No

	Variable Name	Codes
Combination Results	Intervention	
	Inequality & Level	Yes/No
	Inequality & Location	Yes/No
	Intervention & Level	Yes/No
	Intervention & Location	Yes/No
	Level & Location	Yes/No
Abstract Content Variables	Primary and secondary article theme	awareness of SDOH, attitudes towards addressing health inequities barriers and facilitators to addressing SDOH, health inequities, improving health outcomes community development, participation, capacity building, mobilization, social capital or cohesion, impacts or needs assessments evaluation or description of health promotion, public health interventions gender and health, sexual health geography, place, location, environments and health healthcare – access, utilization, costs, expenditures, systems, delivery, primary care, human resources health outcomes - disabilities, diseases, illnesses, injuries, mortality healthy lifestyles – general, diet, exercise, preventive screening, vaccines, alcohol, smoking, drugs, sun exposure, etc. income, SES, social class, wealth and health, social gradients inter-sectoral collaboration, coordination, comprehensive, inter-disciplinarity, partnerships healthy child development - maternal, prenatal, neonatal, children, youth, school health mental health (including mental illness) minority health (Aboriginals, immigrants, refugees, other minorities) occupational, employee health and worksite interventions oral health (oral hygiene, dental interventions) research (conceptual, training, indicators, instruments, methods, knowledge translation, knowledge gaps) seniors' health social supports, social inclusion, self-efficacy, care-giving, self-empowerment social, public, health, urban policy or planning, SDOH, upstream factors, broader context
	SDOH	Income and socioeconomic status Employment and working conditions Healthy child development Education and literacy Personal health practices & coping skills

	Variable Name	Codes
		Health services Social support networks Social environments Physical environments Biology & genetic endowment Gender Culture More than 3 None specified
	Outcome Difference Discourse	Inequities (& social justice) Inequalities Disparities Outcomes-focused, determinants of health
	Implicates Community	Yes/No
	Implicates Municipal Government	Yes/No
	Types of Municipal Roles Implicated	(String variable)

APPENDIX 3: ANALYTICAL FRAMEWORK FOR LITERATURE REVIEW

Quantity of Abstracts

- How many abstracts for each body of literature are there?
    - How many abstract hits were found for each body of literature?
    - What was the inclusion rate for each body of literature?
    - How did inclusion rates vary by body of literature, database, and search theme combination?

Bibliographic Characteristics

- In which countries/geographical regions were the abstracts produced?
- What types of studies were profiled?
- What study populations were employed in the abstracts?

Search Theme Results

- What is the distribution of abstracts across the 6 search themes?
    - What proportion of abstracts encompasses multiple themes?
- How much correspondence is there between abstracts from the 'level' search themes with the mentioning of 'municipal' role?
- How much correspondence is there between abstracts from the 'location' search themes with Canada or North America as the country of origin?
- What do the search theme results say about the nature and contents of the 'health inequities' knowledge base?

General Abstract Contents

- What was the distribution of articles themes in the abstracts?
- What was the distribution of determinants of health in the abstracts?
- What was the distribution of article themes among the most commonly profiled primary determinants of health (i.e., income, personal health practices, healthcare, social supports, social environments, physical environments)?
- Which discourses were employed, and to which bodies of literature did these discourses correspond?

Changes in Literature over Time

- How does the quantity of literature change over time?
- How does the profiling of any of the following variables change over time:
    - Primary and secondary article themes?
    - Determinants of health?
    - Discourse employed?

Implicating Municipal Governments

- Of those abstracts articulating a role for municipal governments, what…
    - Types of studies were they?
    - Geographical regions were they describing?
    - Were the most common article themes?
    - Were the SDOH profiles?

- What was the nature of the implications made for municipal governments?

APPENDIX 4: SURVEY INSTRUMENT

The Role of Municipalities in Addressing Local Health Issues

A Survey of Municipal Staff and Politicians in Metro Vancouver

SFU SIMON FRASER UNIVERSITY
THINKING OF THE WORLD

January 2008

This is a survey of staff and politicians from member municipalities of Metro Vancouver. The purpose of this survey is to assess understandings of determinants of population health outcomes, assess perceptions of the responsibilities and constraints on municipalities in addressing local health disparities, and gather information on what Metro Vancouver municipalities are doing to address these disparities. The results from this survey will be informative for both researchers and municipal governments attempting to improve health outcomes and reduce health disparities of local residents.

Survey Backgrounder

An ever-growing body of literature demonstrates that municipalities play a role in influencing the health and well-being of local populations in several ways, including but not limited to:

- Protective services (e.g., policing, fire/rescue services)
- Health promotion (e.g., parks & recreation, nutrition programs)
- Healthcare delivery (e.g., public health, hospitals)
- Enhancing well-being (e.g., cultural events, community centers)
- Public investments (e.g., libraries, pedestrian infrastructure), and
- Socioeconomic redistribution (e.g., social housing, food banks, shelters).

The diversity of these pathways underscores the reality that municipalities can influence population *health outcomes* through policy levers that fall outside traditional health sectors, and without making health an explicit goal of the intervention. That is, all municipal departments can play a role in improving health outcomes.

It is also well established that residents of any municipality do not enjoy the same level of health and well-being; some residents are very healthy, while others are quite unhealthy. Differences in health outcomes, or *health disparities*, are often considered the products of systemic differences in health determinants, including but not limited to:

- Biology (e.g., genetic endowment, physiology)
- Lifestyle (e.g., diet, physical activity level)
- Demographics (e.g., age, gender, ethnicity)
- Socio-economic status (e.g., wealth, education, occupation), and
- Environments (e.g., air quality, housing, crime, social cohesion).

At the municipal level, health disparities are also evident along spatial dimensions. That is, populations with similar health profiles often cluster in distinct geographical zones, such as neighbourhoods. Municipalities can influence these disparities by mitigating or reinforcing these spatial clusters and/or by providing differential access to the health pathways described above. Thus, not only do municipalities influence the health of populations, they also influence the directions and magnitudes of health disparities that are observed in local populations.

This survey deals with these two related, yet distinct, concepts: the determinants of municipal populations' *health outcomes*; and the influence of municipalities on reducing population *health disparities*. Part 1 of the survey deals with the former, while parts 2 and 3 deal with the latter.

Part 1: This section of the survey deals with population *health outcomes* and their determinants.

1. **Based on your personal and professional experience, which neighbourhood in your municipality of employment has the:** *(Please identify one neighbourhood using the name assigned by the municipality.)*

   healthiest population?

   _____

   least healthy population?

   _____

According to a Health Canada report (2002), there are twelve key factors that influence the health of communities and populations to varying degrees. These influential factors have been labeled the 'determinants of health', and are listed in the table below. Questions 2 and 3 deal with the determinants of population health outcomes in general, while questions 4, 5, and 6 deal with jurisdictional responsibilities for these determinants.

2. **How *influential* do you think each determinant listed below is to the health and well-being of people living in your municipality?** (*Please check one box for each determinant.*)

Determinant of Health	Extremely Influential	Very Influential	Somewhat Influential	Not Very Influential	Not Influential At All
Income	☐1	☐2	☐3	☐4	☐5
Helpful family and friends	☐1	☐2	☐3	☐4	☐5
Education	☐1	☐2	☐3	☐4	☐5
Jobs and working conditions	☐1	☐2	☐3	☐4	☐5
A strong sense of community	☐1	☐2	☐3	☐4	☐5
Clean air and water	☐1	☐2	☐3	☐4	☐5
Maintaining a healthy lifestyle	☐1	☐2	☐3	☐4	☐5
Having a healthy childhood	☐1	☐2	☐3	☐4	☐5
Individuals' biological and genetic makeup	☐1	☐2	☐3	☐4	☐5
Hospitals and healthcare professionals	☐1	☐2	☐3	☐4	☐5
Gender	☐1	☐2	☐3	☐4	☐5
Culture and tradition	☐1	☐2	☐3	☐4	☐5

3. What level of *priority* do you believe should be given to addressing these determinants of health to improve the health and well-being of people living in your municipality? (*Please check one box for each determinant.*)

Determinant of Health	Very High Priority	High Priority	Some Priority	Low Priority	Not a Priority At All
Income	☐1	☐2	☐3	☐4	☐5
Helpful family and friends	☐1	☐2	☐3	☐4	☐5
Education	☐1	☐2	☐3	☐4	☐5
Jobs and working conditions	☐1	☐2	☐3	☐4	☐5
A strong sense of community	☐1	☐2	☐3	☐4	☐5
Clean air and water	☐1	☐2	☐3	☐4	☐5
Maintaining a healthy lifestyle	☐1	☐2	☐3	☐4	☐5
Having a healthy childhood	☐1	☐2	☐3	☐4	☐5
Hospitals and healthcare professionals	☐1	☐2	☐3	☐4	☐5

4. Of the 9 determinants of health listed in question 3, which <u>one</u> do you think warrants the highest priority for being addressed?

_____

a. Who do you think is most responsible for addressing this determinant?

_____

5. Of the 9 determinants of health listed in question 3, which <u>one</u> do you think municipalities are *best* positioned to address?

_____

a. Why?

_____

_____

6. Of the 9 determinants of health listed in question 3, which <u>one</u> do you think municipalities are *worst* positioned to address?

_____

a. Why?

_____

_____

Part 2: This section of the survey deals with population health disparities and the potential roles municipalities can play in reducing these disparities. A definition of 'health disparities' is provided in the survey backgrounder (page 2).

7. Based on existing legislation, funding structures, and mandates, how <u>responsible</u> are each of the following sectors for reducing health disparities? (*Please check one box for each sector.*)

Sector	Most Responsible	Very Responsible	Somewhat Responsible	Not Very Responsible	Not Responsible At All
Federal government	☐1	☐2	☐3	☐4	☐5
Provincial governments	☐1	☐2	☐3	☐4	☐5
Regional health authorities	☐1	☐2	☐3	☐4	☐5
Regional governments (e.g., Metro Vancouver)	☐1	☐2	☐3	☐4	☐5
Municipal governments	☐1	☐2	☐3	☐4	☐5
Non-profit (voluntary, community-based, faith-based, advocacy, etc.)	☐1	☐2	☐3	☐4	☐5
Market/private business/for-profit	☐1	☐2	☐3	☐4	☐5
Private citizens	☐1	☐2	☐3	☐4	☐5

8. Based on existing legislation, funding structures, and mandates, how <u>influential</u> could each of the following sectors be in reducing health disparities? (*Please check one box for each sector.*)

Sector	Extremely Influential	Very Influential	Somewhat Influential	Not Very Influential	Not Influential At All
Federal government	☐1	☐2	☐3	☐4	☐5
Provincial governments	☐1	☐2	☐3	☐4	☐5
Regional health authorities	☐1	☐2	☐3	☐4	☐5
Regional governments (e.g., Metro Vancouver)	☐1	☐2	☐3	☐4	☐5
Municipal governments	☐1	☐2	☐3	☐4	☐5
Non-profit (voluntary, community-based, faith-based, advocacy, etc.)	☐1	☐2	☐3	☐4	☐5
Market/private business/for-profit	☐1	☐2	☐3	☐4	☐5
Private citizens	☐1	☐2	☐3	☐4	☐5

9. If municipal governments wanted to reduce health disparities within their jurisdictions, what level of priority do you think they would have to assign to each of the following policy levers to achieve this goal? *(Please check one box for each lever.)*

Municipal Policy Lever	Very High Priority	High Priority	Some Priority	Low Priority	Not a Priority At All
Public libraries and other information services	☐1	☐2	☐3	☐4	☐5
Arts and cultural programs	☐1	☐2	☐3	☐4	☐5
Parks and recreation facilities and programs	☐1	☐2	☐3	☐4	☐5
Community centers	☐1	☐2	☐3	☐4	☐5
Neighbourhood safety programs	☐1	☐2	☐3	☐4	☐5
Social and non-market housing programs	☐1	☐2	☐3	☐4	☐5
Homelessness programs	☐1	☐2	☐3	☐4	☐5
Food security programs	☐1	☐2	☐3	☐4	☐5
Addiction prevention and treatment programs	☐1	☐2	☐3	☐4	☐5
Early childhood education and daycare programs	☐1	☐2	☐3	☐4	☐5
Public transportation	☐1	☐2	☐3	☐4	☐5
Cycling and pedestrian infrastructure	☐1	☐2	☐3	☐4	☐5
Property taxes and home owners grants	☐1	☐2	☐3	☐4	☐5
Zoning laws and building permits	☐1	☐2	☐3	☐4	☐5
Bylaw enforcement	☐1	☐2	☐3	☐4	☐5
Police, fire, emergency, and disaster protection	☐1	☐2	☐3	☐4	☐5
Health impact assessments	☐1	☐2	☐3	☐4	☐5
Inter-governmental relations	☐1	☐2	☐3	☐4	☐5
Relations with private business sector	☐1	☐2	☐3	☐4	☐5
Relations with non-profit sector	☐1	☐2	☐3	☐4	☐5
Citizen engagement	☐1	☐2	☐3	☐4	☐5

10. If there are any other existing policy levers not listed in question 9 that municipal governments could use to reduce health disparities, please describe them below.

11. In terms of reducing health disparities, how constrained do you think municipalities are by the following forces? *(Please check one box for each constraint.)*

Constraint on Municipality	Extremely Constrained	Very Constrained	Somewhat Constrained	Not Very Constrained	Not Constrained At All
Insufficient federal funding	☐1	☐2	☐3	☐4	☐5
Insufficient provincial funding	☐1	☐2	☐3	☐4	☐5
Insufficient political autonomy	☐1	☐2	☐3	☐4	☐5
Political under-representation on RHA boards	☐1	☐2	☐3	☐4	☐5
Insufficient inter-governmental collaboration	☐1	☐2	☐3	☐4	☐5
Insufficient collaboration within municipal government	☐1	☐2	☐3	☐4	☐5
Insufficient knowledge/expertise of issues within municipal government	☐1	☐2	☐3	☐4	☐5
Too few taxation options	☐1	☐2	☐3	☐4	☐5
Insufficient municipal-level tax base	☐1	☐2	☐3	☐4	☐5
Opposition from private business sector	☐1	☐2	☐3	☐4	☐5
Short tenures for municipal politicians	☐1	☐2	☐3	☐4	☐5
Unsupportive public opinion	☐1	☐2	☐3	☐4	☐5
Lack of political will	☐1	☐2	☐3	☐4	☐5
Excessive residential in-migration	☐1	☐2	☐3	☐4	☐5
Excessive residential out-migration	☐1	☐2	☐3	☐4	☐5

12. If there are any other existing constraints not listed in question 11 on municipal governments' abilities to reduce health disparities, please describe them below.

Part 3: This section of the survey deals with what your municipality is doing to reduce population health disparities in its jurisdiction.

13. What level of priority do you feel your municipality of employment assigns to reducing health disparities within its jurisdiction? *(Please check one box.)*

Very High Priority	☐1
High Priority	☐2
Some Priority	☐3
Low Priority	☐4
Not a Priority at All	☐5

14. To your knowledge, which department or unit in your municipality bears greatest responsibility for addressing health disparities?

_____

15. If applicable, please identify any existing policies, plans, and/or programs that you are aware of within your municipality of employment that address health disparities?

_____

_____

_____

a. Where can I find more information about this policy, plan, or program?

_____

16. To your knowledge, is health an explicit goal of any existing municipal policies, plans, or programs?

Yes	☐1 → *If yes, please describe below.*
No	☐2
Unsure	☐3

_____

_____

Demographics: This section of the survey is designed to learn more about you and other survey participants, by asking general demographic questions. Please remember that **your responses** to these questions are **confidential** and will only be used to describe, as a whole, the group of individuals participating in this study.

17. Which of the following best describes your current position with your municipality of employment? *(Please check one box that is most relevant.)*

Mayor	☐1
City councilor	☐2
City manager/chief administrative officer	☐3
Deputy city manager	☐4
Director/general manager/head of department	☐5
Deputy/assistant director of department	☐6
Manager/director of unit in department	☐7
Manager/director/coordinator of program in unit/department	☐8
City solicitor	☐9
City clerk	☐10
Fire chief	☐11
Deputy fire chief	☐12
Officer in charge (RCMP)/police chief	☐13
Chief/director/manager of libraries	☐14

Other (specify):_____

18. In which department or sector are you currently employed? *(Please check one box that is most relevant.)*

City Council	☐1
City Manager/Administrator	☐2
Human Resources	☐3
Legislative Services	☐4
Finance	☐5
Engineering	☐6
Parks	☐7
Recreation & Culture	☐8
Planning & Development	☐9
Fire & Rescue	☐10
Police	☐11
Libraries	☐12

Other (specify):_____

19. How long have you been in this position? *(Please check one box that is most relevant.)*

Less than 6 months	☐1
6 months to less than 1 year	☐2
1 year to less than 2 years	☐3
2 years to less than 5 years	☐4
5 years to less than 10 years	☐5
10 years or more	☐6

20. In general, would you say your health is:

Excellent	☐1
Very Good	☐2
Good	☐3
Fair	☐4
Poor	☐5

21. What is your current age? _____ years

22. Are you…

Male	☐1
Female	☐2

23. Which of the following best describes the highest level of education you've completed? *(Please check one box that is most relevant.)*

High school diploma or less	☐1
Some post-secondary education	☐2
Community college diploma	☐3
Technical/vocational school diploma	☐4
Undergraduate degree	☐5
Graduate degree	☐6
Professional degree	☐7
Other	☐8

24. Which of the following would best describe your <u>household</u> annual income in 2006? *(Please check one box that is most relevant.)*

Less than $40,000	☐1
$40,000 to $49,999	☐2
$50,000 to $59,999	☐3
$60,000 to $69,999	☐4
$70,000 to $79,999	☐5
$80,000 to $89,999	☐6
$90,000 to $99,999	☐7
$100,000 and over	☐8

THIS IS THE END OF THE SURVEY. THANK YOU FOR YOUR VALUABLE INPUT.

APPENDIX 5: PILOT STUDY FEEDBACK SURVEY

1. Approximately how long did it take you to complete the survey? _____ minutes

2. Did the "survey backgrounder" (on page 2) provide clarity, confusion, or neither?

   _____

3. Prior to reading the survey backgrounder, how aware were of these issues? (1 being very aware, 5 being not aware at all, please circle) 1 2 3 4 5

4. Did you find the backgrounder directed your survey responses (please circle)? Yes No

5. Were any of the survey questions unclear? If so, indicate which question(s) and explain why.

   _____

   _____

6. On a scale of 1 to 5, how difficult was it to complete this survey? (1 being very easy, and 5 very difficult; please circle) 1 2 3 4 5

7. Were any questions particularly challenging to answer? If so, indicate which question.

   _____

   _____

8. Were there any questions that were not asked in this survey that you felt were relevant to the topic? If so, please specify.

   _____

   _____

9. Do you have any recommendations for improving the format of the survey?

   _____

   _____

10. Did you feel you gained anything from completing this survey?

    _____

    _____

11. Do you have any other comments about the survey?

    _____

    _____

Thank you very much for helping me to evaluate my survey instrument. You have provided very useful feedback, which will be extremely helpful as I finalize my survey instrument.

APPENDIX 6: PRENOTICE LETTER

January 22, 2008

«FirstName» «LastName»
«Position_in_Municipality»
«Address»
«City», «Province», «Postal_Code»

Dear «FirstName» «LastName»,

In a few days, you will receive a package in the mail requesting your participation in a survey. This project is part of my doctoral research at Simon Fraser University.

The survey is soliciting individual *opinions* concerning the key factors that influence the health of local populations, and the potential roles municipalities can play in reducing disparities in health outcomes. The survey is not aiming for a representative random sample, but rather a census of *all* politicians and senior-level staff from *every* department from Metro Vancouver member municipalities. Thus, whether your department deals directly with these issues or not, your opinions are relevant because of your influential role in the «Title_City».

I am writing in advance because many people like to know ahead of time that they will be contacted. The study is an important one, as it will illuminate for researchers and municipal governments, such as the «Title_City», how health issues are understood by influential government actors across Metro Vancouver, as well as how these actors conceptualize solutions to these issues. The results of the survey will also facilitate opportunities for Metro Vancouver member municipalities to become familiar with innovative activities by other municipalities in the region.

Thank you for your time and consideration. It's only with the generous help of people like you that this research can be successful.

Sincerely,

Patricia Collins, M.Sc., Ph.D. candidate
Principal Investigator, Municipal Governments and Health Inequalities Study
Department of Geography, Simon Fraser University
Email: pcollins@sfu.ca

APPENDIX 7: COVER LETTER FOR SURVEY PACKAGE

January 25, 2008

«FirstName» «LastName»
«Position_in_Municipality»
«Address»
«City», «Province», «Postal_Code»

Dear «FirstName» «LastName»,

Please help us understand the role that municipalities play in addressing local health problems.

I am contacting you to request that you complete the enclosed survey for a research study entitled "*Exploring the roles of urban municipal governments in addressing population health disparities: Prescriptions, capacities, and realities"*. This study is part of my doctoral research at Simon Fraser University, and is federally supported by the Social Sciences and Humanities Research Council and provincially supported by the Michael Smith Foundation for Health Research.

The purpose of this study is to better understand the role that municipal governments can play in reducing health disparities. This study involves reviewing academic literature, **consulting with a wide spectrum of municipal government actors**, and examining related municipal government documents. Population health disparities are not only observable at the national level, but are also observable at much smaller geographical levels, such as neighbourhoods. Similarly, municipal governments can profoundly influence the health and well-being of local residents, despite not bearing direct governmental responsibility in the health sector. Yet, municipal governments, and the various departments within these governments, are commonly overlooked by researchers attempting to understand how best to reduce population health disparities. This study begins to correct this oversight by bringing municipalities into the conversation.

As part of this study, I am conducting a **census** of elected officials and senior-level staff of municipal governments from **every department** within all Metro Vancouver member municipalities. The survey will take approximately 20 minutes to complete and participation is strictly voluntary. Responses will be kept **confidential** by assigning a number (last page, bottom right corner) that will be used to identify each survey. Participants' names will not be identifiable in any reports or manuscripts that are produced from the survey. In addition, results by participants' job titles and/or municipality of employment will be reported in aggregate form, so as not to inadvertently identify any participants.

Please return the completed survey using the self-addressed stamped envelope provided in the package.

I appreciate that you are very busy, but I do hope that you will be able to allot time from your hectic schedule to participate in this survey. Obtaining your perspective is critical to the success of this study. If you have any questions or wish additional information about the survey, please do not hesitate to email me. Results will be distributed to survey participants upon its completion.

Sincerely,
Patricia Collins, M.Sc., Ph.D. Candidate
Principal Investigator, Municipal Governments and Health Inequalities Study
Department of Geography, Simon Fraser University
Email: pcollins@sfu.ca

APPENDIX 8: REMINDER POSTCARD

SFU

Patricia Collins, Department of Geography
8888 University Drive
Burnaby BC CANADA
V5A 1S6

Place Postage Here

«FirstName» «LastName»
«Position_in_Municipality»
«Address»
«City», «Province»
«Postal_Code»

Recently, a questionnaire was sent to you seeking your opinions on health issues in your municipality. The health of every Metro Vancouver resident is influenced by the activities of all departments within their municipal governments. Thus, obtaining your perspective is of particular value to this study, as it will offer insight into the potential roles of municipal governments in addressing local health issues.

If you have already completed and returned the survey, please accept my sincere thanks and disregard this reminder. If not, please do so today. If you did not receive a questionnaire, or if it was misplaced, please contact me by email, and I will send you another one today.

Sincerely,

Patricia Collins, M.Sc., Ph.D. candidate, Email: pcollins@sfu.ca
Department of Geography, Simon Fraser University

APPENDIX 9: SECOND SURVEY MAILING COVER LETTER

February 13, 2008

«FirstName» «LastName»
«Position_in_Municipality»
«Address»
«City», «Province», «Postal_Code»

Dear «FirstName» «LastName»,

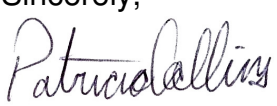
About three weeks ago, I wrote to you requesting your participation in a census of opinions about local health issues in the «Title_City». As of today, I have not received your completed survey. I realize that you have a very busy schedule, and your participation in this survey is greatly appreciated.

The purpose of this study is to better understand the role that municipal governments can play in improving the health and well-being of local populations. The objective of the survey is to establish a **census** of opinions held by elected officials and senior-level staff from **every department** of every Metro Vancouver municipality. As such, I am writing to you again because the usefulness of my findings is contingent on the participation of each of my contacts. The survey results will offer a unique opportunity for Metro Vancouver municipalities to learn how this diverse group of influential individuals view local health issues as well as what strategies are being employed by local municipalities to tackle these concerns.

Responses to the survey are kept strictly **confidential**. Job titles and municipalities of employment will be reported in aggregate form to protect participants' identities.

In the event that your questionnaire has been misplaced, a replacement is enclosed. I hope very much that you will take the time to participate in this study. Obtaining your perspectives is critical to the success of this study. If you have any questions about the study, please do not hesitate to email me.

Sincerely,



Patricia Collins, M.Sc., Ph.D. candidate
Principal Investigator, Municipal Governments and Health Inequalities Study
Department of Geography, Simon Fraser University
Email: pcollins@sfu.ca

APPENDIX 10: EMAIL FOLLOW-UP CONTACT

Good afternoon,

Since January, a number of contacts have been made with you seeking your participation in an opinion census on health issues in your municipality. While municipalities do not have direct jurisdiction over the delivery of healthcare services, there remain a number of ways in which municipalities *can* influence the health and well-being of local populations. Thus, your perpsective is critical to the success of this study because of the influential role you play in your municipality.

To date, your completed survey has not been received. This message is your final reminder to complete and return the survey. If you are still interested in participating, please note that the deadline for returned surveys is Friday March 7th, 2008. Some participants have expressed concerns that they do not feel qualified to complete the survey. Let me reassure you that the survey is by no means a test of knowledge, that all opinions are entirely valid, and that you are welcome to leave any questions blank that you feel you cannot answer.

I understand that it is an extremely busy time of year for municipalities, and I am especially grateful for your participation in this survey. If you have already completed and returned the survey, please accept my sincere thanks and kindly disregard this reminder.

Sincerely,

Patricia Collins, M.Sc., Ph.D. candidate
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Simon Fraser University, 8888 University Drive
Burnaby, BC, V5A 1S6

APPENDIX 11: ANALYTICAL FRAMEWORK FOR SURVEY ANALYSIS

Objectives of the Survey Analysis:

1) To assess participants' understanding of and attitudes towards the SDOH;
2) To assess the capacity of municipalities, in general, to address local health disparities;
3) To elicit information on the extent and nature of participating municipalities' efforts to address local health disparities; and
4) To assess the relationship between municipal attitudes and capacities for action on health disparities.

Section 1: General Characteristics of Participants

- What were the response rates:
    - Overall?
    - By municipality?
    - By position?
    - By department?
- To what extent were the original contacts the survey respondents?
- What were the demographic, occupational, and self-rated health statuses of respondents?

Section 2: Addressing Objective #1

- Which neighbourhoods did participants identify as the healthiest and least healthy?
    - How much consensus was there on the neighbourhoods that were mentioned?
- What were participants' understanding of and attitudes toward the SDOH?
    - How do understanding and attitudes correlate with one another?
- Do understanding and attitudes towards the SDOH vary by Municipality, Density, Position, or Department?
- Which determinants of health were considered the:
    - Highest priority for action? Who was implicated?
    - Easiest for municipalities to address?
    - Hardest for municipalities to address?

Section 3: Address Objective #2

- What level of responsibility and influence did participants assign to various sectors for addressing health disparities?
    - How do these levels of responsibility and influence correlate with one another?
- Do perceived levels of responsibility and influence for addressing health disparities vary by Municipality, Density, Position, or Department?
- What level of priority did participants assign to the various policy levers for addressing health disparities?

- What level of constraint did participants assign to the various forces for addressing health disparities?
- Do perceptions of preferred policy levers and policy constraints vary by Municipality, Density, Position or Department?
- To what extent were priorities for various policy levers correlated with one another? Concerns with policy constraints correlated with one another?

Section 4: Addressing Objective #3

- What level of priority is assigned to reducing health disparities?
    - How does this vary by municipality, density, department, position in municipality?
- Which departments or units were identified as bearing greatest responsibility for addressing health disparities?
- Summarize policies and plans identified for each municipality.
    - Which policies, plan, or programs were identified as having explicit health goals?

Section 5: Addressing Objective #4

- What is the relationship between the level of influence assigned to the SDOH and the level of influence on reducing health disparities assigned to different sectors? Between the level of priority for action assigned to the SDOH and the level of responsibility for addressing health disparities assigned to different sectors?
- Is the level of priority a participant thinks their municipalities assigns to addressing health disparities predicted by:
    - Municipality
    - Density
    - Park Land
    - Municipal Tax Rate
    - Position
    - Department
    - Perceptions of policy levers and policy constraints

APPENDIX 12: SUMMARY TABLES OF RESULTS FOR TESTS OF SIGNIFICANT DIFFERENCES

Significant Differences in Level of Influence and Priority for Action for the SDOH

	SDOH	Municipality	Density	Elected vs. Non-Elected	Position	Department
		p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest
Level of Influence of SDOH	Income	ns	p<0.001, high/low density	ns	ns	ns
	Family	ns	ns	ns	ns	ns
	Education	ns	ns	ns	ns	ns
	Jobs	ns	ns	ns	ns	ns
	Strong community	ns	p=0.009, medium/low density	p=0.007, elected/non-elected	ns	ns
	Air & water	ns	p=0.007, medium/low density	ns	ns	ns
	Lifestyle	ns	ns	ns	ns	ns
	Childhood	ns	ns	ns	ns	ns
	Biology	ns	ns	ns	ns	ns
	Hospitals	ns	ns	ns	ns	ns
	Gender	ns	ns	p=0.007, elected/non-elected	ns	ns
	Culture	ns	ns	ns	ns	ns
Level of Priority for Action on SDOH	Income	ns	ns	ns	ns	ns
	Family	ns	p=0.005, low/high density	ns	ns	ns
	Education	ns	ns	ns	ns	ns
	Jobs	ns	ns	ns	ns	ns
	Strong community	p=0.002, West Vancouver/Delta	p=0.002, medium/high density	ns	ns	p<0.001, city council/fire & rescue
	Air & water	p=0.010, Port Moody/City of	ns	ns	ns	ns

	SDOH	Municipality	Density	Elected vs. Non-Elected	Position	Department
		p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest
		Langley				
	Lifestyle	ns	ns	ns	ns	ns
	Childhood	ns	ns	ns	ns	ns
	Hospitals	ns	ns	ns	ns	ns

Significant Differences in Level of Sectoral Responsibility and Influence for Addressing Health Disparities

	Sector	Municipality	Density	Elected vs. Non-Elected	Position	Department
		p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest
Level of Responsibility	Federal government	ns	ns	ns	ns	ns
	Provincial governments	ns	ns	ns	ns	ns
	Regional health authorities	ns	ns	ns	ns	ns
	Regional governments	ns	ns	p=0.003, non-elected/elected	ns	ns
	Municipal governments	p=0.001, Delta/Port Moody	ns	p=0.008, non-elected/elected	ns	p=0.004, parks & rec/council
	Non-profit sector	ns	ns	ns	ns	ns
	Market	ns	ns	ns	ns	ns
	Individuals	ns	ns	ns	ns	p=0.005, engineering/fire & rescue
Level of Influence	Federal government	ns	ns	ns	ns	ns
	Provincial governments	ns	ns	ns	ns	ns
	Regional health authorities	ns	ns	ns	ns	ns
	Regional	p=0.003,	ns	ns	ns	ns

	governments	West Vancouver/Pitt Meadows				
	Municipal governments	p=0.010, Surrey/Port Moody	ns	p=0.006, non-elected/elected	ns	p=0.005, parks & rec/council
	Non-profit sector	ns	ns	ns	ns	ns
	Market	ns	ns	ns	ns	ns
	Individuals	ns	ns	ns	ns	ns

Significant Differences in Levels of Influence of Policy Levers and Policy Constraints for Addressing Health Disparities

		Municipality	Density	Elected vs. Non-Elected	Position	Department
		p-value, Highest/Lowest	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**
Policy Levers	Public libraries	ns	ns	p=0.006, elected/non-elected	p=0.002, librarians/police chiefs	p<0.001, libraries/police
	Arts and culture	ns	ns	ns	p=0.001, others/police chiefs	p<0.001, parks & rec/police
	Parks and recreation	ns	ns	ns	p=0.005, others/fire chiefs	ns
	Community centers	ns	ns	ns	p=0.002, others/city managers	p<0.001, parks & rec/libraries
	Neighbourhood safety	ns	ns	ns	ns	p=0.004, parks & rec/engineering
	Social housing	ns	ns	ns	ns	p<0.001, planning/manager
	Homelessness	ns	ns	ns	ns	p<0.001, police/fire & rescue
	Food security	ns	ns	ns	ns	ns
	Addiction prevention	ns	ns	ns	ns	p=0.002, police/engineering

		Municipality	Density	Elected vs. Non-Elected	Position	Department
		p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest	p-value, Highest/Lowest
	Early child education	ns	ns	ns	ns	ns
	Public transportation	ns	ns	ns	ns	ns
	Cycling infrastructure	ns	ns	ns	ns	ns
	Property taxes	ns	ns	ns	ns	ns
	Zoning laws	ns	ns	ns	ns	ns
	Bylaw enforcement	ns	ns	ns	ns	ns
	Police fire protection	ns	ns	ns	ns	ns
	Health impact assessments	ns	ns	ns	ns	ns
	Inter-governmental relations	p=0.001, Vancouver/North Vancouver City	ns	ns	ns	ns
	Relations with businesses	ns	ns	ns	ns	ns
	Relations with non-profits	ns	ns	ns	ns	ns
	Citizen engagement	ns	ns	ns	ns	ns
Policy Constraints	Insufficient federal funding	ns	ns	ns	ns	ns
	Insufficient provincial funding	ns	ns	p=0.003, elected/non-elected	ns	p=0.005, council/libraries
	Insufficient political autonomy	ns	ns	p=0.007, elected/non-elected	ns	p<0.001, planning/parks & rec
	Under-representation on	ns	ns	p<0.001, elected/non-	p=0.006, clerks/librarians	ns

	Municipality	Density	Elected vs. Non-Elected	Position	Department
	p-value, Highest/Lowest	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**	**p-value, Highest/Lowest**
RHAs			elected		
Insufficient inter-gov collaboration	ns	ns	p=0.001, elected/non-elected	ns	ns
Insufficient collab w/n municipality	ns	ns	p=0.006, elected/non-elected	ns	ns
Insufficient knowledge w/n municipality	p=0.008, White Rock/North Vancouver City	ns	ns	ns	ns
Too few taxation options	ns	ns	p=0.010, elected/non-elected	ns	ns
Insufficient tax base	ns	ns	ns	ns	ns
Opposition from private businesses	ns	ns	ns	ns	ns
Short political tenures	p=0.008, New Westminster/North Vancouver City	ns	ns	ns	ns
Unsupportive public opinion	ns	p=0.005, low/medium	ns	ns	ns
Lack of political will	ns	ns	ns	ns	ns
Excessive residential in-migration	ns	p=0.001, medium/low	ns	ns	ns
Excessive residential out-migration	ns	ns	ns	ns	ns

APPENDIX 13: CODEBOOK/DATA EXTRACTION FRAMEWORK FOR OCP DOCUMENT ANALYSIS

HEALTH DISCOURSES IN OFFICIAL COMMUNITY PLANS

Is health discussed in the OCPs? If so, how?

- *Health*
- *Well-being*
- *Disease, illness, disability & injury*

How are differences framed in the OCPs?

- *Equity or inequity*
- *Equality or inequality*
- *Disparity*
- *Gradients*
- *Determinants of health*

Which determinants of health are mentioned, and are they discussed in terms of health?

- *Income & Social Status*
  - income, socioeconomic, wealth, poverty, poor, affordab, subsid*
- *Social Support Networks*
  - support services, independen*, support network
- *Education & Literacy*
  - educat*, litera*, school, student, training
- *Employment & Working Conditions*
  - employ, job, labour
- *Social Environment I – Social Services*
  - assistance, (community/soft) services, amenities, provider, agenc*, police, enforce, partnerships
- *Social Environment II – Community Characteristics*
  - pride, civic, heritage, assets, participation, safety, security, divers*, character, identit*
- *Physical Environment I – Built Environment*
  - (hard) services, facilities, infrastructure, built environment, buildings, roads, corridors, fire
- *Physical Environment II - Natural environment*
  - air, water, soil, climate, trails, green space, greenway, ecosystem, ecolog*, natur*, environment
- *Personal Health Practices & Coping Skills*
  - lifestyle, behaviour, coping, addiction, alcohol, drug, diet, exercise, physical activity, physically active, cycl, biking, walking, pedestrian, leisure, recreation
- *Early Childhood Development*

- child, child care, daycare, preschool, pregnancy, baby
- *Biology & Genetic Endowment*
  - biology, genetic, inherit, familial, predispose
- *Health Services*
  - health care, healthcare, health services, health facilities, primary care, hospital, clinic, doctor, nurse, medic*, emergenc*, ambulan*
- *Gender*
  - women, men, gender, homosexual, gay, lesbian, bisexual, transgendered
- *Culture & Tradition*
  - cultur*, tradition, religio*, ethnic, racial, art

ACADEMIC PRESCRIPTIONS FOR MUNICIPAL INTERVENTION IN OCPS

Are any prescriptions for municipal intervention discussed in the OCPS?

- *Conduct assessments, gather data*
  - priorit*, attitude, values, opinions (of local residents/community)
  - assess, monitor, feasib*, survey, evaluat*, impact, indicator, measurement, data, study, research, engage*, involv*, participat*, consult*

- *Health strategies, programs, education*
  - public health, health promotion, promote health, health education, population health, determinants, healthy communit*
  - health care, health services, primary care, medic*, mental health, home care, hospital, clinic, health facilities, aging-in-place
  - health authority, health region, ministry (of health), (health/medical) officer, Health Canada

- *Inter-governmental initiatives, relations, responsibilities*
  - government, federal, provinc*, ministry, region, municipal
  - relation*, coordinat*, partnership, collaborat*, lobby, advoca*, (Local Government/Municipal) Act, authority, autonomy, jurisdiction, responsibilit*, offload, download

- *Intra-gov capacity, leader, facilitator*
  - (in terms of relations within government) (social) planning, comprehensive, integrat*, collaborat*, coordinate
  - (in terms of relations with non-government) lead, proactive, steward, foster, grants, funder, negotiate, facilitate, strengthen

- *Develop community networks, partnerships*
  - partnership, collaborat*, cooperat*, co-operat*
  - non-government, private sector, non-profit, nonprofit, school board, agencies, providers, community groups, organizations, stakeholders

- *Improve infrastructure, built environment*

- infrastructure, facilit*, improv*, upgrade, safe, restrict, provision, redevelopment, construct, install, retrofit, adaptive, maintenance, design, replace, infill, sprawl, rezon*, traffic, utilit*, sewer, waste, recycling, walking distance, roadway, routes, lanes, parking, buffer, furniture, furnish, streetscape, signage

Are challenges to municipal intervention discussed?

- *Challenges*
  - Revenue, funding, tax, fiscal, do more with less, do-more-with-less, offload, download, autonomy, authorit, responsib, jurisdiction, legislat*, impediment, disincentive, barrier, challeng, limitation, constraint, Provinc, Federal, senior government, accordance

OCP-DRIVEN THEMES

- *Vibrant economy*
  - econom*
- *Livability, quality of life*
  - livab*, quality of li*, standard of living, desirable, enjoyable
- *Population growth management*
  - population, grow
- *Complete communities*
  - complete communit*, compact, live work play invest, sufficient, close to (work/home/services), walking distance, cycling distance, short distance, short-distance, mixed-use, mixed use, amenit*, urban village, neighbourhood centre, shopping, store, balance, intensification
- *Reflecting local needs*
  - needs, prefer, values, priorities, desire, reflect, express*, expectation, satis*
- *Engaged citizenry*
  - engage, involv*, participat*, consult, inform, educate, aware
- *Protect nature, agriculture, heritage*
  - natur*, ecosystem, ecolog*, environmental, sensitiv*, Green Zone, estuary, climate, energy, agricultur*, farm, conserv*, preserv*, protect, sustainab*, habitat, heritage, histor*
- *Transportation choice*
  - transportation choice, transit, vehicle, automobile, carpool, occupan*, cycl*, biking, urban trail, light rail, LRT, skytrain, bus, trolley, tram
- *Housing*
  - residential opportunities, housing opportunities, housing choice, housing type, types of housing, densit*, ground-orient, ground orient, secondary suite, affordab*, housing market, market housing, rental, townho*, storey, high rise, low rise, detached, apartment, condo*, strata, shelter, transition homes, special needs housing, stock, multi-family

APPENDIX 14: RESULTS OF THEMATIC ANALYSIS OF SDOH

Code	Municipality	Primary Contexts
ISS	Burnaby	-Create affordable housing – protect rental stock, secondary suites, partnerships with non-profits
	New Westminster	-Diverse housing options for diverse incomes -Create affordable housing – protect rental stock, secondary suites, encourage market & non-market development -Reduce cycle of poverty through comprehensive care, partnerships with Province, lobby senior governments -Low average household income, low home ownership rates -Universal access to service regardless of income
	Richmond	-Income changes over lifecycle -Create affordable housing – rezoning, lobby senior governments, fast-track non-market housing approvals, encourage market & non-market development
	Surrey	-Diverse housing options for diverse incomes -Access to affordable transportation, services, opportunities, facilities -Create affordable housing – density bonuses, fast-track non-market housing approvals -Facilitate honourable, dignified living
	Vancouver	-Accessibility, inclusion across all incomes -Create affordable housing – subsidize housing units, lobby senior governments, protect rental stock
SSN	Burnaby	-Support services for seniors, facilitate independent living -Youth support services -Community self-help initiatives, community-based programs
	New Westminster	-Support services for people with special needs, parents -Facilitate independent living, aging-in-place
	Richmond	-Support services for seniors, facilitate independent living, aging-in-place -Youth support services, disability support services, cultural support services

Code	Municipality	Primary Contexts
	Surrey	-Agricultural support services
	Vancouver	-Targeted services – family counselling, youth support services
EL	Burnaby	-Integrate school and community-based facilities for cost-sharing, mutual benefits -Schools within walking distance of homes -Partnerships with school board, SFU, BCIT -Improve transportation to school facilities
	New Westminster	-Youth programs delivered in school -Partnerships with school board, Simon Fraser Health Region -Integrate school and community-based facilities for cost-sharing, mutual benefits -Increase school capacities for enrolment -Educate public about heritage, recycling
	Richmond	-Increase school capacities for enrolment -Schools within walking distance of homes, safe routes to school -Integrate school and community-based facilities for cost-sharing, mutual benefits -Educate public about environmental preservation, bylaws, crime, emergency preparedness, accident prevention, pollution, energy conservation -Partnerships with the school board, colleges
	Surrey	-Elementary schools as key component of 'urban neighbourhood' -Schools within walking distance of homes, safe routes to school -Integrate school and community-based facilities for cost-sharing, mutual benefits -Educate public about environmental stewardship, natural hazards, crime -Partnerships with school board, Provincial Ministry
	Vancouver	-Integrate school and community-based facilities for cost-sharing, mutual benefits -Partnerships between school, library and park board for arts & cultural programs
EW	Burnaby	-Provide opportunities for people to work close to home -Attract employment-intensive industries, especially commercial (retail and office) -Maintain industrial nodes that generate high employment levels, and redevelop low-employment

Code	Municipality	Primary Contexts
		industrial lands for transition to other types of employment **-Use existing employment facilities more intensively** **-Concentrate employment opportunities at high density nodes served by transit** **-Provide amenities that attract employment growth**
	New Westminster	**-Balance population and employment growth using targets** **-Promote employment growth in all sectors, diversify economic base, retain existing employment** **-Work close to home - create neighbourhood centres which offer diverse employment opportunities, encourage home-based employment, residential intensification in high employment & amenity areas** **-Intensify industrial areas, expand institutional facilities** **-Partnerships with Province, local agencies to reduce unemployment, social assistance dependence** **-Attract employment-intensive industries, especially commercial (retail and office)** **-Develop employment opportunities for youth**
	Richmond	**-Intensify existing employment-based land uses to increase employment opportunities** **-Protect productive agricultural land use** **-Attract employment-intensive industries** **-Improve transit facilities near employment nodes, transportation connections between housing and jobs** **-Promote city as major industrial employment center in Lower Mainland**
	Surrey	**-Promote employment growth in all sectors, diversify economic base, retain existing employment** **-Create Growth Concentration Areas – nodes for employment and residential intensification** **-Ensure adequate supply of marketable land for employment growth** **-Provide opportunities for people to work close to home** **-Increase travel capacity across Fraser River for economic development, employment opportunities**
	Vancouver	**-Create neighbourhood centres that offer employment opportunities close to home** **-Diverse economy - maintain industrial lands, concentrate major job growth downtown, increase other job growth in neighbourhood centres** **-Locate office-intensive employment near transit nodes**
SE I –	**Burnaby**	**-Social and community services are key elements of compact and complete communities**

Code	Municipality	Primary Contexts
SS		-Provide social and community services that are high quality, accessible (physically, economically, socially, culturally), appropriate (type, scale, design, location), efficient, equitable, foster independence, rooted in local needs, preventative -Ensure adequate level of human services are provided to local population through advocacy to senior governments, partnerships with local agencies, creating spaces in built environment, offering grants -Community policing priorities rooted in public involvement and priorities -Neighbourhood are basic unit of planning for social and community services
	New Westminster	-Social and community services are key elements of compact and complete communities -Provide efficient, effective, high quality and an appropriate amount of community services -Work with community agencies, Provincial government to ensure local needs are being addressed -Employ community policing to reduce crime and nuisance behaviour, especially in multi-housing complexes -Increase access and availability of social and community services through redevelopment and intensification -Ensure population growth does not exceed available services -Implement social planning initiatives – youth, child care, and affordable housing strategies -Advocate on behalf of special needs populations, poor, unemployed, homeless, youth, seniors -Work with non-profit housing societies to increase affordable and accessible housing opportunities, especially for seniors, disabled, special needs populations
	Richmond	-Social and community services are key elements of compact and complete communities – within walking distance -Community services must be appropriate, responsive to community input, and involve public/private partnerships -Provision of a broad range of community services to ensure livability, especially targeted at youth and seniors -Work with local non-profit agencies, senior levels of government to ensure local services meet local needs -Enhance policing services through community policing, traffic safety, emergency assistance -Foster intercultural relations through public consultation and awareness campaigns and cultural services -Provide high-quality, state-of-the-art library services

Code	Municipality	Primary Contexts
	Surrey	-Social and community services are key elements of compact and complete communities – diverse range of services, walking distance -Provision of community services that is appropriate to the local context and adequate in terms of scale and type -Work with senior governments, local agencies, private sector to advocate, fund, deliver appropriate level of services -Increase access and availability of social and community services through redevelopment and intensification in urban nodes or centers -Involve the community in decisions on social services planning and delivery
	Vancouver	-Work with local residents, agencies, senior governments, and City to solve neighbourhood-level problems – tailor services to meet individual and community needs -Deliver community policing to connect police services with public concerns and priorities -Provide a broad range of services in close proximity to where people live – neighbourhood centers -Monitor service quality, target services to those most in need, form partnerships with non-profit agencies -Coordinate efforts and activities across city departments to provide more integrated community services -Monitor local needs for subsidized housing and consider ways to increase availability -Create Integrated Service Teams in neighbourhoods to deliver services more effectively and offer direct links to City Hall
SE II – CC	Burnaby	-Neighbourhoods as building blocks of city, possessing unique characteristics -Protect, preserve and enhance valued community assets (especially parks and open spaces) that make it a desirable place to live -Partnerships with local agencies to protect and enhance affordable housing in the city, protect ecosystem, heritage properties and resources -Foster civic pride through increased awareness of local history and heritage, civic duty and responsibility through provision of high quality community services and facilities -Foster community well-being through creation of complete, self-sufficient and diverse communities -Respect community goals for economic growth, community values -Ensure meaningful community involvement and participation in decision-making related to environment, zoning, community planning, community policing

Code	Municipality	Primary Contexts
		-Strong sense of community, mature, urbane, socially and culturally diverse
	New Westminster	-Reduce crime, nuisance behaviour, increase safety and personal security through community policing, CPTED, infrastructure improvements -Create community focal point and identity through pedestrian-oriented neighbourhood centres -Preserve, protect, increase public awareness of, and enhance heritage resources, natural resources (e.g., street trees), beautify streetscapes -Commitment to enriching unique social and physical character of City -Preserve neighbourhood character amidst population growth -Ensure new developments and buildings are consistent with existing character of neighbourhood, city -Promote livability through community policing, services, civility, intercultural relations, promoting arts -Continuously evolving community values, community prioritizes livability -Engaging the public to determine community goals, potential impacts of new developments -Promote the tourism sector
	Richmond	-Increase safety and personal security through police visibility, partnerships, awareness campaigns -Create diverse neighbourhoods with strong sense of community, identity, protect distinct character of neighbourhoods -Promote community cohesion, pride, interaction by creating neighbourhood gathering places/public realms -Protect and enhance natural and historical assets, 'garden city' image -Ensure new housing developments are consistent with existing single-family character of neighbourhood, city -Promote street beautification, enhance streetscapes for pedestrian safety and security -Promote rich social fabric by fostering intercultural relations, supports and awareness of disability issues -Community commitment to maintain agricultural land
	Surrey	-Reduce crime, nuisance behaviour, and increase personal safety and security using CPTED -Develop neighbourhood centers to offer focal points for community -Enhance neighbourhood, town and city centre identity by delineating boundaries, integration with surrounding context, traffic calming, gathering spaces -Enhance quality of community through protection and preservation of heritage, delivery of services,

Code	Municipality	Primary Contexts
		building community identity and pride **-Ensure new developments are consistent with existing single-family character of neighbourhood, city** **-Build on city's cultural and artistic character and diversity using festivals, events, public art** **-Enhance city's image and character to attract investment, "a great city with a heart", attractive place to live, work, street beautification** **-Consult key stakeholders and involve the public in land-use planning decisions, form partnerships with local agencies in provision of services**
	Vancouver	**-Prevent crime and enhance safety, especially using community informed community-based policing** **-Create neighbourhood centres that form heart of distinct neighbourhoods, with extensive community input** **-Neighbourhoods have distinct character and identity that should be preserved** **-Promote arts, culture, self-expression, heritage and diversity**
PE I – BE	**Burnaby**	**-Reduce overall need to travel by creating compact communities where people live close to work** **-Improve the road system and emphasize carrying more people with fewer vehicles, improve capacity for trucks, reserve rights of way for public transit, HOVs, cyclists, pedestrians, increase safety and maximum efficiency** **-Manage population growth by concentrating high density residential and employment development along transportation corridors, and nodes served by transit** **-Conserve heritage buildings as key connections to our past** **-Provide and maintain facilities that offer accessibility, diversity, independent living: public utilities, educational facilities, recreational and cultural facilities, fire protection, police and public safety, library services, and religious and health facilities.** **-Neighbourhoods based on delivery of social, recreational and institutional facilities and services** **-Locate parks and recreation facilities adjacent to elementary and secondary school facilities to allow joint use, mutual benefit, cost-sharing** **-Ensure all new developments offer roads, sidewalks, sewerage, water, drainage, underground wiring, street lighting, recycling, and garbage and yard waste collection** **-Industries cluster near available infrastructure** **-Establish appropriate relationships between built environment, air, land and water quality** **-Adopt an ecosystem and stewardship perspective in land-use decisions, public works, and infrastructure**

Code	Municipality	Primary Contexts
		development
	New Westminster	**-Create complete, compact communities that deliver facilities of high quality, appropriate amount, and within walking distance of housing** **-Ensure development of new facilities fits with character of surrounding environment, context, neighbourhood** **-Reduce negative impacts of transportation facilities on surrounding areas by working towards no new added capacity in the transportation system, implement traffic calming measures, buffering and screening, promoting alternative transportation** **-Focus population growth along transportation corridors, ensure growth does not exceed infrastructure capacity, upgrade or replace infrastructure when required** **-Provide infrastructure that is safe, efficient, and convenient to facilitate transportation options – pedestrian, cyclist, transit friendly measures (bus shelters, bus bulges, sidewalk lighting, widen bicycle lanes, bicycle racks and lockers)** **-Promote the retention, conservation and adaptive reuse of heritage buildings throughout the City** **-Continue high level of maintenance, as well as upgrading and expansion where necessary, of city's parks and recreational, and institutional facilities** **-Develop and use infrastructure and utilities in an effective and efficient manner** **-Promote tourism by developing new arts, culture, and recreational facilities** **-Encourage energy efficiency in new buildings and development** **-Target non-market supportive housing facilities at mentally ill, seniors, disabled** **-Ensure high health and safety standards for aging stock and new building developments**
	Richmond	**-Create complete, compact, pedestrian-scale communities that deliver facilities of high quality, appropriate amount, and within walking distance of housing** **-Improve road networks to facilitate more efficient movement of people and goods, especially trucks** **-Reduce negative impacts of transportation facilities on surrounding areas, especially agricultural land, by implementing traffic calming, major and minor roads, promoting alternative transportation** **-Improve infrastructure for alternative transportation options, end-of-trip facilities for cyclists** **-Promote the retention, conservation and adaptive reuse of heritage buildings throughout the City** **-Provide community facilities that are high quality, accessible, well-located, user-friendly, and support independent living**

Code	Municipality	Primary Contexts
		-Work with the school board to assist in development of new, or expansion of existing, school facilities -Use infrastructure and public utilities efficiently and effectively, maintain, improve, and replace when necessary -Adapt existing corridors (drainage and hydro corridors, fire lanes) for greenways and public open spaces -Ensure industrial sector is well supported in terms of public utilities, infrastructure, and efficient and safe roads -Ensure facilities for treatment and removal of stormwater, wastewater and solid waste are high quality and well-maintained -Protect agricultural land using buffers, roadways, clear urban-rural divides, reduce transportation related impacts -Ensure buildings for seasonal farm labour accommodations comply with all zoning and building regulations
	Surrey	-Ensure the city center and neighbourhood centers offer a broad range of facilities and services, pedestrian oriented -Plan, design and build neighbourhood centers that conform to existing character of neighborhoods, facilitate variety of housing options, pedestrian and cyclist friendly, and foster a cohesive environment -Ensure roads facilitate efficient movement for trucks, cars, public transit and bicycles, improve road infrastructure when necessary, implement major and minor road system, use grids, protect local roads, traffic calming -Promote population growth and densification along transit corridors, increase transit frequency, efficiency, accessibility -Improve infrastructure for alternative transportation options, convenient connections for cyclists and pedestrians -Provision of high quality parks and recreation facilities in an integrated, accessible, and equitable manner -Encourage redevelopment of land where public utilities and infrastructure are already in place -Work with/lobby senior levels of government to support infrastructure improvements -Implement CPTED when designing new buildings -Strong local economy, adequate tax base to support provision of facilities and services -Encourage energy efficiency in new buildings and developments
	Vancouver	-Build compact communities that prioritize walking and cycling, public transit, HOV lanes

Code	Municipality	Primary Contexts
		-Protect neighbourhood character by encouraging protection of heritage buildings, prioritize low-scale buildings, developments that conform to existing character of neighbourhood -Implement CPTED when designing new buildings -Increase recycling program, implementing polluter pay programs, conservation of water and electricity
PE II – NE	Burnaby	-Designate, protect Green Zone lands, including parks, open spaces, environmentally sensitive areas, agriculture -Minimize the impact of industry and transportation on natural environment - pollution, water run-off, noise, spills -Protect the agricultural land reserve, preserve the land base, reduce negative impacts -Link natural features and urban living through a comprehensive urban trail/greenway system -Continue to acquire, protect and preserve parks and open spaces as valued aspects of the community -Protected parks and opens spaces include Burnaby Mountain, Burnaby and Deer Lakes, Burrard Inlet -Adopt an ecosystem perspective, environmental considerations in planning decisions, urban design -Inextricable link between natural environment, economic health, and community health
	New Westminster	-Develop Green Zone that will protect parks, open spaces, greenways, trails, and environmentally sensitive areas from urban development -Reduce impact of transportation on natural environment by promoting alternative modes of transportation, buffering, noise-resistant buildings, and pollution reductions -Reduce localized air and water pollution, improve air and water quality, protect aquatic life, encourage energy efficiency -Provide high quality, accessible parks and open spaces, and facilitate connections between them using trail/greenway systems -Create more livable, sustainable communities by enhancing the natural environment -Replace street trees in poor health, prune trees, beautify streetscapes with greenery
	Richmond	-Protect the Green Zone which includes natural and environmentally sensitive areas, parks and open spaces, and agricultural land -Work in partnership with senior governments to improve air quality, water quality and aquatic habitat, protect ESAs, mitigate public health or environmental hazards, and monitor environmental concerns -Minimize negative impacts of transportation, industrial land uses on agricultural lands, air, water and soil

Code	Municipality	Primary Contexts
		quality, and natural environment **-Promote alternative modes of transportation to facilitate healthy environment, efficient movement of goods, integrate a cycling network within existing trail system** **-Build a sustainable legacy that combines natural and human environments in a compatible, non-detrimental way** **-Balance economic growth, jobs, and development with natural environment and social well-being** **-Build on 'Garden City' reputation to create a 'park-like city', by strategically using natural amenities and landscape resources**
	Surrey	**-Preserve, integrate and coordinate protection of the natural environment and agricultural land** **-Work cooperatively with senior governments to protect natural and ESAs by preserving watercourses and wetlands, fish and wildlife habitats, increase environmental awareness, incorporate environmental sustainability principles in budgeting, planning, and development** **-Minimize impact of traffic on ESAs through promotion of alternative modes of transportation, air water and noise pollution** **-Provide, preserve and protect greenspace corridors that link natural and urban environments** **-Promote self-sufficient, environmentally sustainable, and energy efficient communities, planning, and development** **-Encourage businesses that operate in environmentally responsible ways**
	Vancouver	**-Provide more extensive greenway networks/trail systems on streets, trails, open spaces** **-Protect the environment by designing complete, compact communities that are pedestrian and cyclist friendly** **-Improve air and water quality by encouraging alternative transportation, garbage reduction, water conservation**
PHPCS	**Burnaby**	**-Promote changes in travel behaviour by altering the transportation system** **-Create opportunities and infrastructure for recreational and transportation-based cycling** **-Make cycling a more viable transportation option – rights-of-way, safe facilities, bike-friendly transit** **-Create a comprehensive pedestrian/cycling system that links housing with employment and amenities** **-Promote walking through improvements to transit system, pedestrian-friendly development** **-Preserve and protect parks, open spaces, and existing facilities for recreation**

Code	Municipality	Primary Contexts
		-Equitably locate and deliver recreation and leisure activities, facilities, services -Provide facilities to support recreation and leisure for all ages
	New Westminster	-Promote alternative modes of transportation, such as walking, cycling and public transit -Provide cycling-specific infrastructure (bike lockers, racks, showers) to increase cycling -Ensure infrastructure is pedestrian-friendly, support pedestrian-oriented development -Ensure housing, parks, services, amenities, etc. are within walking distance -Provide high quality recreational services, facilities and opportunities that meet needs of community -Protect existing, and negotiate for more, park land for passive and active recreation -Reduce nuisance behaviours, offer youth-based programs
	Richmond	-Promote alternative modes of transportation, such as walking, cycling and public transit -Create cycling-friendly infrastructure – rights-of-way, safety, aesthetics, transit friendly -Partner with GVRD to create an efficient and comprehensive regional cycling network -Ensure streets facilitate safe and efficient movement by foot, bike, scooter, wheelchair, bus -Ensure infrastructure is pedestrian-friendly, pedestrian-oriented, and pedestrian-scaled -Improve existing parks for passive and active recreation -Promote walk-to-school programs, employer-based trip reduction programs -Coordinate with public, non-profit and private sector to ensure adequate leisure services
	Surrey	-Promote alternative modes of transportation, such as walking, cycling and public transit -Improve opportunities for cyclists to use transit, offer cycling-specific infrastructure (bike lockers, racks, showers) -Establish a cycling network for safe, efficient and convenient passage by bicycle -Design neighbourhoods so that activities and services are within walking or cycling distance -Plan, design, and develop compact pedestrian-oriented, mixed-use neighbourhood centres -Develop or maintain existing levels of safety, comfort, enjoyment and convenience for pedestrian -Equitably locate and deliver recreation and leisure activities, facilities, services -Balance efficient movement of goods with provision of walking and cycling opportunities -Reduce nuisance behaviours using CPTED

Code	Municipality	Primary Contexts
		-Protect suburban lifestyle in face of growth concentration -Work with other agencies, private sector to provide recreational services and facilities
	Vancouver	-Promote alternative modes of transportation, such as walking, cycling and public transit -Offer more parks, recreational opportunities that are responsive to local needs
ECD	Burnaby	-Provide recreational facilities for preschoolers and young children, child care facilities -Advocate to senior levels of government for national child care strategy
	New Westminster	-Provide licensed child care close to home and child care alternatives (e.g., supported and group child care initiatives) -Implement municipality-based child care strategy through partnerships with community, advocacy for child care facilities in new developments
	Richmond	-Provide child-friendly housing options, especially for lone-parents -Advocacy for child care facilities in new developments, especially in housing developments subsidized by senior governments -Advocate to senior levels of government for national child care strategy
	Surrey	-Locate schools in safe proximity to children's homes
	Vancouver	-Provide programs for children and youth
HS	Burnaby	-Develop continuing care facilities in partnership with Simon Fraser Health Region -Advocate and cooperate with Regional Health Board, senior levels of government, community agencies and other appropriate parties to ensure public health, mental health, continuing care, and acute care services are being provided to local residents -Provide, develop, build health facilities
	New Westminster	-Work with the Simon Fraser Health Region to deliver a model of comprehensive care - housing, substance abuse treatment and job training -Ensure transition homes for disabled, health centres are well integrated into community -Encourage hospital facility and bed expansion -Promote public health use, development of activities around healthcare facilities
	Richmond	-Inform regional health board of local health needs

Code	Municipality	Primary Contexts
		-Improve emergency medical response services and systems, develop safety plans
	Surrey	-Incorporate needs of emergency services in neighbourhood and building designs and developments
	Vancouver	-Ensure local health services meet local health needs
GE	Burnaby	-Increasing number of women in the labour force
	New Westminster	N/A
	Richmond	-Transition homes for women and children fleeing violence -High quality affordable daycare to promote women's economy equality
	Surrey	-Recognize unique housing needs of abused women
	Vancouver	N/A
CAT	Burnaby	-Provision of immigrant settlement services, cultural services and facilities -Promote local culture and arts programs, work with community arts groups -Socially, culturally and ethnically diverse population -Educate public on heritage, preserve and protect heritage resources -Support development of religious facilities that are appropriate to community needs, location, and scale
	New Westminster	-Provide arts and cultural facilities, services, opportunities -Support development of arts and entertainment facilities, venues, promote tourism sector -Promote city as creative and vibrant -Preserve features of historic or cultural value, significance -Promote intercultural relations, community cultural events
	Richmond	-Foster vibrant arts community, culture facilities -Promote public art program, civic pride, private investment in local artists -Support inclusivity, integration for ethnically and culturally diverse population -Educate public about cultural awareness, seek community input on arts and culture programs
	Surrey	-Provide cultural resources, facilities, and amenities -Promote community-based events, festivals, and promote visual art projects

Code	Municipality	Primary Contexts
		-Support development of venues for cultural expression, performing and visual arts **-Preserve, protect, revitalize resources of historical or cultural significance in community**
	Vancouver	**-Foster cultural inclusivity, support cultural diversity** **-Promote local arts community, encourage local artists** **-Promote downtown as arts and culture hub, increase neighbourhood-based arts and culture activity** **-Partnerships with school, library, park boards, non-profits, and private sector**

APPENDIX 15: RESULTS OF THEMATIC ANALYSIS OF MUNICIPAL INTERVENTIONS

Intervention	Municipality	Key Themes
Conduct assessments, gather local data	**Burnaby**	**-Seek local input on growth management, public safety, rezoning, transportation, housing types and locations, heritage, environment, parks and green spaces, fire and police services, community policing,** **-Develop City goals, budget and plans based on community involvement and local values** **-Monitor environmental quality and impacts of local decisions, address environmental concerns and incorporate env'tal considerations** **-Conduct neighbourhood-level planning, community transportation planning**
	New Westminster	**-Involve the community in heritage conservation** **-Ensure OCP, new developments reflect changing values and priorities** **-Envision New Westminster - public consultation to formulate community vision and priorities** **-Monitor employment targets, housing stock, growth, socioeconomic conditions** **-Monitor needs for child care, aging, special needs populations and school populations, social programming from senior governments, housing affordability and availability** **-Monitor and evaluate provincial programs, Simon Fraser Health Region's plans, city services and facilities** **-Involve youth in decision-making** **-Assess the feasibility of a LRT system**
	Richmond	**-OCP priorities based on survey of local residents, will be monitored and adjusted wrt budget** **-Seek local input regarding VIAA issues, heritage sites, policing priorities, housing priorities** **-Assess, monitor new and expanded capital developments based on financial impacts, relevance to OCP, reflection of local values** **-Reduce impacts of commercial and industrial development by requiring EIAs and development permits** **-Monitor impacts of growth on transportation system, drainage and waste capacity** **-Assess feasibility of redeveloping industrial land for high-density, mixed use**
	Surrey	**-Improve opportunities for public participation in local decision-making opportunities, offer an array of opportunities for involvement, encourage involvement at early stages of land-use decision-**

Intervention	Municipality	Key Themes
		making -Track, assess, monitor impact of development with respect to OCP goals -Minimize impacts on natural environments, agriculture by transportation and other land uses -Minimize social impacts arising from growth
	Vancouver	-Involve community in planning neighbourhood centres, budget priorities, housing developments, service delivery, community policing -Community consultation to develop goals, objectives, priorities for CityPlan
Health promotion, education, strategies	Burnaby	-Work in an advocacy and cooperative role with the Simon Fraser Regional Health Board to provide public health, mental health, continuing care and acute care services that meet needs of local residents
	New Westminster	-Work with Province and Simon Fraser Health Region to deliver a comprehensive care model - housing, substance abuse treatment and job training -Work with senior governments, to ensure health services, facilities are provided, advocate for mental health services, aging-in-place options for seniors -Create healthy communities by adopting a SDOH perspective
	Richmond	-Adopt a SDOH perspective to provide comprehensive care -Work with regional health board to provide accessible, appropriate healthcare services for all residents
	Surrey	N/A
	Vancouver	-Foster development of medical facilities in uptown area.
Inter-governmental initiatives, relations, roles	Burnaby	-Provide a regional context statement to demonstrate the consistency between OCP and LRSP around growth management, livability, ecological preservation -Work with other local governments for growth management, environmental stewardship, efficient public transportation, cycling infrastructure -Work with senior levels of government for environmental stewardship, subsidized housing supply, public transportation, protect agricultural land, child care, health and continuing care facilities, assess health and social needs and advocate for services, school facilities -Put LRSP principles into action by promoting 'complete communities' that put objectives of LRSP into action, designate Green Zone lands, develop an efficient transit system

Intervention	Municipality	Key Themes
		-Take advantage of Provincial policy changes – legislation to increase supply of secondary suites, enhanced capacity for social planning activities **-Promote coordinated growth management across municipalities to ensure that regional growth management strategy can be achieved**
	New Westminster	**-Provide a regional context statement to demonstrate the compatibility and consistency between local (OCP) and regional (LRSP) plans, strategies, and policies around growth management, livability, ecological preservation** **-Work with other local governments to develop a regional Green Zone, a regional transportation system, putting LSRP into action** **-Work with senior levels of government for subsidized housing, institutional care facilities, reducing poverty, homelessness, and unemployment, addressing needs of seniors, public safety, assess health and social needs and advocate for services, increase transit ridership** **-Take advantage of Provincial policy changes – legislation to increase supply of secondary suites, enhanced capacity for social planning activities** **-Study, monitor, evaluate – effectiveness of Provincial social programs, feasibility of regional cycling greenways, environmentally sensitive areas** **-Strengthen local environmental policies with senior government environmental policies** **-Participate in regional transportation demand management initiatives**
	Richmond	**-Provide a regional context statement to demonstrate the compatibility and consistency between local (OCP) and regional (LRSP) plans, strategies, and policies around growth management, livability, ecological preservation** **-Work with other local governments to develop a regional transportation system, regional cycling network, put LRSP into action** **-Work with senior governments to improve farming viability, implement flood protection strategies, accommodate housing and transportation needs of airport, environmental stewardship, improve air and water quality, subsidized housing, regulate shoreline development, increase understanding of climate change issues, assess health and social needs and advocate for services, school facilities, child care**
	Surrey	**-Provide a regional context statement to demonstrate the compatibility and consistency between local (OCP) and regional (LRSP) plans, strategies, and policies around growth management, livability, ecological preservation**

Intervention	Municipality	Key Themes
		-Work with other local governments on policies concerning growth management, land use and design along border regions, road planning and traffic management, cross-boundary environmental issues **-Work with senior governments for improvements in infrastructure, communications, utilities, transportation and tourism sectors, improve pedestrian environment, reduce single-occupant car travel, support local agriculture, environmental stewardship, protecting against floods, special needs housing** **-Support, implement, and monitor success of implementation of LRSP principles - plan complete and sustainable communities, establish Green Zones, develop in growth concentration areas, support public transit** **-Take advantage of Provincial policies – Local Government Act facilitates provision of density bonuses to developers**
	Vancouver	**-Work with other local governments, senior governments, and local community to solve local problems, address environmental concerns** **-Work with senior governments to increase subsidized housing** **-Support the principles of the LRSP through CityPlan policies**
Intra-governmental capacity, leader, facilitator	**Burnaby**	**-Lead by example on environmental issues, use energy wisely, minimize production of waste** **-Environmental stewardship through inter-departmental planning – ecosystem and watershed planning, parks and conservation, public works, land use regulation** **-Social planning should be integrated and comprehensive, linking physical, economic, environmental and social factors; social and land use planning need to be integrated; social needs are conceived of broadly** **-Integration across providers of services, programs, and facilities that serve the public** **-Develop a comprehensive transportation plan for the city that involves transportation and development planning; integrate land use planning with delivery of transit** **-Advocate, provide funding for, provide facility space for, partner, in delivery of human services** **-Be a steward of heritage resources, promote heritage conservation, increase public awareness and interest in heritage issues**
	New Westminster	**-Set an example for community by being energy efficient, recycling, reusing** **-Investigate and address complex social issues through multi-departmental committee – Task Force**

Intervention	Municipality	Key Themes
		on Community Problems and Social Issues **-Social planning – address social issues, encourage collaboration between departments, develop a policy framework** **-Local agencies – collaborate with and advocate for agencies, assist with funding** **-Heritage preservation – offer grants, advice, support to owners for restoration, provide density bonuses** **-Work proactively to strategically enforce neighbourhood livability by targeting nuisance businesses, behaviours, crimes, liquor licenses, building safety** **-Facilitate partnerships, communication between non-profit, CBOs, private sector**
	Richmond	**-Adopt proactive strategies to be steward of farmland, environment wrt parks, energy, waste** **-Ensure comprehensive and coordinated public utility planning that is integrated with provision of urban facilities and services** **-Ensure compatibility between transportation planning and the industrial land strategy, transit priorities, movement of goods** **-Strengthen tourism, sense of community, civic pride, and visitor functions in Richmond neighbourhoods, develop a 'park-like city'** **-Facilitate development of transition homes for needy populations** **-Facilitate availability and awareness of services for seniors, special needs groups**
	Surrey	**-Increase environmental stewardship, awareness and education of environmental issues, be a leader in waste reduction, incorporate sustainability principles in planning and development** **-Social planning – deliver coordinated programs and services to address social needs, develop a Social Planning Strategy** **-Increase coordination between parks and school facility planning and development, joint integrated planning of facilities that serve school and community needs** **-Promote Surrey's tourism industry, public image** **-Ensure that subordinate departmental master plans conform to the OCP** **-Promote new business development that facilitates complete communities and is compatible with the social fabric and structure of the city, facilitate the live/work concept** **-Facilitate development and location of agricultural-related businesses and services, create an agricultural development strategy**

Intervention	Municipality	Key Themes
	Vancouver	**-Develop Integrated Community Service Teams with representatives from Fire, Police, Parks, Library, Health, and other City departments, improve coordination between city departments** **-Integrate and coordinate school, park, and library boards to better serve individual and neighbourhood needs** **-Increase subsidized housing supply by providing funds, raising additional funds for projects, lobbying senior governments**
Develop community partnerships, networks	**Burnaby**	**-Conduct social planning, deliver social programs in partnership with community groups, through an integrated and cooperative manner, work with non-profits in needs assessment, providing grants, providing space in community centers** **-Work in partnership with School Board to develop joint-use school and park facilities, to ensure that educational, recreational, and cultural needs are being met** **-Form partnerships with non-profit housing groups, funding agencies, developers, etc. to increase supply of affordable housing** **-Work in partnership with local agencies to improve public transit, rights-of-way for cyclists, pedestrians and HOVs** **-Environmental stewardship is a shared responsibility and reflects a common attitude between various levels of government, CBOs, and private sector, protect Burnaby's ecosystem**
	New Westminster	**-Collaborate with local agencies for social planning activities, to assess local needs and deliver services, facilities and utilities in a coordinated manner** **-Work in partnership with School Board to develop joint-use school and park facilities** **-Encourage and facilitate housing societies in creating affordable, non-market housing units, especially for seniors and special needs populations** **-Develop partnerships with key community stakeholders whenever possible to make efficient use of resources and strengthen community ties** **-Advocate for the needs of the poor, seniors, disabled populations by assessing service delivery of local providers, provide funding and lobby senior governments for more funding for CBOs**
	Richmond	**-Collaborate with local agencies for social planning activities, to assess local needs and deliver services, facilities and utilities in a coordinated manner, especially for youth, special needs** **-Work in partnership with School Board to develop joint-use school and park facilities** **-Work in partnership with local non-profits to increase supply of affordable housing**

Intervention	Municipality	Key Themes
		-Work with community groups to promote cultural events, support local artists, celebrate agricultural sector, recognize importance of heritage conservation -Work with local public and private agencies to increase awareness of impacts of single-occupant travel, and to improve transportation system for HOV travel -Work with community groups to implement environmental stewardship initiatives, secure ESAs, make environmental improvements -Work in partnerships with community organizations to deliver emergency services, establish crime prevention programs, increase awareness of safety issues, disaster preparedness
	Surrey	-Form public-private partnerships for community development and social planning -Work with the private sector, school board, local community groups to promote educational and community use of facilities and open spaces, make school facilities multi-purpose and a focal point for neighbourhoods -Form partnerships with CBOs to improve and enhance Surrey's image and character, an attractive place to live work and play -Form partnerships with private developers and non-profit groups to increase development of private recreation facilities and services within residential developments and workplaces
	Vancouver	-Residents, local agencies, schools, all levels of government will work together to solve local community problems and provide services tailored to meet local needs -Expand arts and cultural activity in the city by increasing cooperation between arts, business, recreation and education partners -Deliver community-based policing by working with community groups and partners
Improve social, physical environments	Burnaby	-Parks, trails – provide parks and recreation facilities that meet local needs, develop an urban trail system that is separated from traffic and connect cyclists and pedestrians to community facilities and amenities -Transportation - improve the public transit system, encourage residential and commercial development along rapid transit corridors, improve arterial roadways for more efficient movement of goods, improve rights-of-way for pedestrians, cyclists, and HOVs, implement traffic calming and safety measures -Industrial – review existing industrial developments for utility and benefit to community, consider redevelopment of outdated permitted commercial developments in industrial zones, remove professional/office and retail developments from industrial zones, infill and densify industrial zones

Intervention	Municipality	Key Themes
		for continued industrial use **-Housing – construct ground-oriented housing to prevent further urban sprawl, implement density bonuses to replace rental housing in new developments, facilitate construction of secondary suites, adapt housing units to accommodate special needs, develop a variety of housing types in urban villages, rezone to increase development of smaller lot, multi-family subdivisions** **-Environmental stewardship – use energy wisely in City operations and activities, promote stewardship in any investments in public works and infrastructure, promote recycling and backyard composting** **-Complete communities - Redevelopment of town centers into mixed-use, high density, complete communities, infilling and promotion of high-profile commercial land uses** **-Facilities, infrastructure, utilities and services - provide a broad range of services and facilities – parks, recreation, leisure, religious, utilities – that meet the needs of the local population; implement seismic upgrades to fire and police facilities where needed, acquire and develop public school facilities that can be used for community purposes** **-Agriculture – minimize impact of transportation system on farm holdings and activities, improve drainage, irrigation and diking** **-Commercial - Establish and enforce a commercial hierarchy, whereby Metrotown consists of highest density office and commercial developments, smaller town centers have similar land uses but on smaller scales, office and professional land uses are concentrated while big box retailers are limited in town centers**
	New Westminster	**-Parks, open spaces – ensure provision of park land and open space is part of redevelopment processes, promote use of utility corridors for open space, create an urban trail system, increase public access to the waterfront, upgrade and expand park amenities** **-Transportation – increase pedestrian and cyclist safety through improvements to the design and quality of the street environment, increase the attractiveness of public transit, implement transit priority measures, provide bike lockers and other end-of-trip facilities, encourage employer trip reduction programs, improve roadways for inter-regional truck and vehicular traffic for efficient movement of goods, increase safety through traffic calming, provide rights-of-way for cyclists, provide bus bulges and shelters, reduce impacts of transportation facilities through buffering and noise resistant buildings** **-Industrial – review industrial development to ensure its compatible with existing areas, uses, and contexts, minimize negative impacts of associated pollution and traffic** **-Housing - rezoning, intensification and redevelopment of under-utilized land, rezone land for**

Intervention	Municipality	Key Themes
		higher-density residential use, convert City-owned land into affordable housing, create ground-oriented housing, promote development of secondary suites, create rental units in multi-family zones **-Streetscapes – beautify and green streetscapes, provide street furnishings, provide signage, protect street trees, provide adequate street lighting, encourage public art, curb cuts and sidewalk quality** **-Complete communities - promote intensification that is orderly, efficient, close to existing amenities and infrastructure, promote adaptive reuse of historic buildings, retain and restore historic facades, walkability, increase housing developments in existing neighbourhood cnetres and along transportation corridors, reduce parking requirements near transit nodes** **-Facilities, infrastructure, utilities and services - provide high quality and an appropriate amount of community facilities, services, spaces, infrastructure, public utilities, and roadways, and make efficient and effective use of these public resources, ensure capacity of utilities, services, infrastructure keep pace with growth; provide high quality services for storm-water management, sewage collection, drinking water, solid waste and recycling** **-Safety – provide effective fire protection, apply floodplain management regulations and construction levels, ensure buildings maintain an adequate level of health and safety** **-Institutional – encourage expansion and seismic upgrades of institutional facilities to attract employment and increase capacity, monitor institutional services to ensure they are meeting local needs, encourage development of complementary facilities near institutions, work with School Board, Health Board to encourage joint use facilities**
	Richmond	**-Parks and open spaces – develop a comprehensive and integrated urban cycling trail system, consider developing corridors (hydro, drainage) as greenways or parks** **-Transportation – improve transit services, provide safe pedestrian and cyclist environment, reduce impacts on neighbouring agricultural land, promote employer-based ride-share programs, improve transportation links to facilitate efficient movement of goods, improve road infrastructure to emphasize and accommodate non-automobile travel, create transit-friendly streets with bus bulges, lanes and shelters, employ system of major and minor roads, traffic calming on minor roads, provide cycling infrastructure (parking, storage, end-of-trip facilities) throughout the city, improve parking facilities** **-Industrial – expand industrial sites for office-based businesses, enhance utility services for industrial zones** **-Housing – increase ground-oriented housing through multi-family townhouse complexes, replace**

Intervention	Municipality	Key Themes
		existing rental housing with more affordable housing, expedite rezoning and development permits for affordable housing complexes, ensure new multi-family developments resemble existing single-family units in neighbourhoods, promote multi-family developments on arterial roads where similar developments exist **-Environmental stewardship – promote energy conservation among City operations, promote increased recycling and decreased waste** **-Streetscapes and city identity – improve walkability and accessibility in neighbourhood centers, reduce big box retailers to car-oriented areas, improve streetscapes of neighbourhood centers to enhance local identity and sense of place, make improvements to city-owned buildings and furnishings, employ urban design principles that focus on 'fit' with existing developments and accessibility, increase street lighting** **-Complete communities – redevelopment and infill of serviced land, redevelopment of unserviced land, subdivision of large lots into smaller ones, locating facilities and services close to neighbourhoods, create safe and convenient connections within neighbourhoods** **-Facilities, infrastructure, utilities and services - ensure constant maintenance and upgrading of public works infrastructure and services, replace and rehabilitate sewer, stormwater, drainage, water, and roads, manage waste disposal, collection and recycling, manage floodplain lands and upgrade dyke system; ensure services are provided (e.g., transit, parks, schools) that balance development and are visibly located, accessible, user-friendly and high quality** **-Agriculture – improve irrigation and drainage systems for farmers, improve access routes for farming purposes, ensure seasonal farm labour accommodations meet City building requirements and codes, restrict development of new roads in the ALR** **-City Centre – develop the high-density core as a destination area, provide adequate transit and transportation links, enhance local hotel and tourism facilities, develop a trade and convention center** **-Schools – work in partnerships with the School Board to improve existing school facilities, develop new facilities for joint community use**
	Surrey	**-Parks and open spaces – coordinate with school board to provide joint-use park and recreational facilities, encourage development of private recreational facilities in residential developments and workplaces, develop open spaces for recreational activities, locate parks and recreational facilities equitably throughout the city** **-Transportation – improve the road network for more efficient movement of goods, promote alternatives to single-occupant car travel by improving cycling infrastructure and transit services,**

Intervention	Municipality	Key Themes
		promote alternative modes of travel in neighbourhood centers, promote street-level barrier-free pedestrian-oriented activity and movement, work with Translink to increase the level of transit service and use, increase safety for pedestrians and cyclists, consider innovative parking arrangements and reduce parking facilities, create an integrated and comprehensive bicycle network, implement traffic calming measures, make public transit more cyclist-friendly, encourage more bicycle infrastructure throughout the city (parking, end-of-trip facilities, lockers, showers) **-Environmental stewardship – promote the creation of energy efficient communities, support residential developments that reduce energy use, support mixed use facilities for shared energy use, promote recycling and reductions in waste, encourage and attract eco-friendly businesses** **-Streetscapes and city identity – ensure new developments respect local character and identity, enhance positive qualities of surrounding area, enhance the attractive and active character of downtown, distinctive landscaping and treescapes, utilize underground wiring as much as possible** **-Complete communities – create town/neighbourhood centers that offer provide an array of amenities, services and facilities in high-density areas, promote walking, cycling and transit use in neighbourhood centers, locate services within walking distances of homes, create pedestrian-oriented civic spaces, ensure neighbourhood centers have transit nodes, increase opportunities to live closer to transit, redevelop and infill vacant or under-utilized urban land, especially in designated Growth Concentration areas, developments should be constructed immediately after approval and should conform to the existing developments** **-Facilities, infrastructure, utilities and services – ensure infrastructure and City services can meet population size, maintain a strong local economy to maintain adequate revenue source/tax base to pay for infrastructure and services, lobby senior governments for major infrastructure improvements** **-Agriculture – provide adequate buffering to protect farmland and ESAs** **-Safety – creating safe environments using CPTED to reduce nuisance behaviour and crime, increase livability through safe and attractive built environments, encourage additional measures for building safety, clear passage for emergency vehicles on streets, incorporate environmental hazards (fires, floods, earthquakes) into community planning and building design**
	Vancouver	**-Transportation – increase transit service, decrease single-occupant travel by increasing gas taxes, bridge tolls and parking fees, improve rights-of-way for HOVs and cyclists, maximize capacity of existing street system** **-Housing – redevelop single-family housing into multi-family dwelling in neighbourhood centres, and retain single-family dwellings outside of those centres**

Intervention	Municipality	Key Themes
		-Environmental stewardship – expand waste reduction and water conservation programs, improve storm and waste water management **-Streetscapes – traffic-calming measures, beautify commercial streets, promote street festivals** **-Complete communities - Reduce urban sprawl by consuming some population growth in Vancouver, creating compact communities that prioritize walking, cycling, and low vehicular traffic**

APPENDIX 16: RESULTS OF THEMATIC ANALYSIS OF CHALLENGES

Municipality	Key Themes
Burnaby	**-Challenges re: social planning – Local Government Act of 1994 bestowed upon municipalities increased responsibility for social planning activities (downloading), funding for social programming from senior governments has decreased, funding from senior governments will become increasingly more difficult to secure, need to ensure that community services and facilities will be available to meet increasing needs of growing population, reduced senior government funding for subsidized housing** **-Challenges re: tax base – need to intensify viable commercial and industrial development to increase growth of tax base and employment, remove existing commercial land uses that no longer meet contemporary needs or employment and tax base objectives** **-Challenges re: development/population growth – to provide more ground-oriented housing, to generate more residential opportunities while respecting existing community assets, monitor changes in Provincial legislation for secondary suties** **-Challenges re: environment – making environmentally responsible decisions in all City operations and activities, environmentally sensitive land management and expectation that others will do the same, environmental stewardship needs to be viewed as a shared responsibility across all levels of government, private sector, non-profits, and general public, integration of senior and local government requirements and regulations regarding environmental management of land use** **-Challenges re: infrastructure and facility improvements, public services – must be done within context of available funding and in a way that reflect city-wide priorities and needs, unresolved funding issues, high public expectations for services and infrastructure in a "do more with less" environment, increased need with less resources**
New Westminster	**-Challenges re: social planning – Local Government Act of 1994 bestowed upon municipalities increased responsibility for social planning activities (downloading), New Westminster has population with lower than average SES profile and higher than average social needs, need to advocate on behalf of these high-needs residents to Province for increased funding for social assistance programs, need to monitor and evaluate these Provincial programs and services** **-Challenges re: tax base – need to intensify viable commercial and industrial development to increase growth of tax base and employment, remove constraints on industrial development** **-Challenges re: development/population growth – accommodate growth through increased housing and employment while respecting and preserving existing community character, seek funding from senior governments for non-market housing, remove (cost and zoning) impediments to development of cost-effective housing especially for seniors and special needs, remove impediments for developers in providing community amenities, monitor changes in Provincial**

Municipality	Key Themes
	legislation for secondary suites **-Challenges re: transportation - Need to work with Province, other GVRD municipalities and regional government to investigate viable transit alternatives and improvements, work with other governments to develop Regional Major Roads network to increase efficient movement of goods, Province is offloading responsibility of roads to regional government** **-Challenges re: infrastructure and facility improvements, public services – must be done within context of funding cuts from senior governments, fewer resources available places strain on City's avility to maintain standard of living** **-Need for greater fiscal accountability among senior governments** **-Livable Region Strategic Plan – deemed a growth strategy by Province, needs to be implemented in cooperation with other GVRD municipalities, regional government, and senior governments**
Richmond	**-Challenges re: development/population growth – reduced senior government funding for subsidized housing, need to work with non-profits and non-governmental agencies to increase stock of non-market housing, ensure that developers bear the costs of providing associated infrastructure and amenities for new developments** **-Challenges re: transportation - Need to work with Province, other GVRD municipalities and regional government to develop regional transportation network and a regional bicycle network, s** **-Challenges re: environment – factors affecting environment are geographically broad and overlapping but jurisdictional responsibilities are divided up among different government, City lacks jurisdiction in key policy areas, work with Province to develop key environmental legislation, work with Province for maintenance and management of dykes, work with Province to protect local agriculture** **-Challenges re: infrastructure and facility improvements, public services – must be done within context of limited public resources, increased need (due primarily to population growth) with fewer resources, high public expectations and growing populations, downloading of responsibilities from senior governments** **-Challenges re: health and education – work with School and Regional Health boards to ensure services meet local needs, to ensure City bylaws and regulations do not restrict provision of education and health services, joint facility and service planning with school board to share costs and improve efficiency** **-Challenges re: fiscal constraints - ensure OCP is implemented, monitored, evaluated regularly, ensure OCP conforms to budgetary constraints, implement the OCP in a fiscally efficient and effective manner, conduct annual economic and fiscal impact analyses of municipal and regional plans** **-Challenges re: inter-gov relations – City can only encourage Province to take action, need to operate according to plans and policies of senior governments (e.g., building heights near airport), need to have plans and policies approved by senior governments, need to work with Vancouver International Airport Authority to reduce airport and aircraft noise**

Municipality	Key Themes
Surrey	**-Challenges re: tax base – need to promote economic development to achieve a balance between the residential and business tax bases, need to increase share of tax revenue from non-residential sources (from 28% to 40%), ensure adequate tax base to provide necessary community facilities and services** **-Challenges re: development/population growth – Province's Growth Strategies Act encourages development of regional growth strategies and encourages inter-municipal coordination in development of growth-related plans and policies,** **-Challenges re: transportation – transportation infrastructure improvements are the combined responsibility of other municipalities, regional government, Translink and the Province, create settlement patterns that reduce automobile reliance in accordance with the Growth Strategies Act, work with regional and Provincial governments on initiatives to reduce single-occupant vehicle travel** **-Challenges re: environment – work in partnership with Province and in accordance with Provincial legislation to support local agriculture, work with senior governments and other local governments to protect environmentally sensitive areas, supplement City environmental policies with guidelines and regulations from senior governments** **-Challenges re: image – need to work with private sector to provide funding for initiatives designed to improve the City's image and reputation**
Vancouver	**-Challenges re: social services – need to coordinate and integrate delivery of human services provided by different levels of government to ensure local needs are met** **-Challenges re: tax base – City will need to increase property taxes and user fees to pay for necessary services and to make up for fiscal restraint from senior governments, implement gas taxes and bridge tolls to increase revenue, decrease City services to reduce expenditures** **-Challenges re: development/population growth – balancing needs of newcomers for jobs and housing with concerns of existing residents directly affected by neighbourhood centre development, strong differences in opinion of what constitutes appropriate scale and character for new development, providing services and amenities that keep pace with growth, maximize effectiveness of senior government funding for subsidized housing by requiring non-market housing units in new developments, uncertainty over how to generate funds for non-market housing in context of senior government funding cuts, need to work with neighbouring municipalities to address regional costs** **-Challenges re: transportation – work with regional and Provincial governments on initiatives to reduce single-occupant vehicle travel and to improve transit system, difficult to improve transit in period of Provincial fiscal restraint**

REFERENCES

Addison, R. B. (1999). "A Grounded Hermeneutic Editing Approach". In B. F. Crabtree and W. L. Miller Doing Qualitative Research. Thousand Oaks, CA: Sage Publications. 145-61.

Anderson, G. F. (2003). "Physician, Public, and Policymaker Perspectives on Chronic Conditions." Archives of Internal Medicine 163(4): 437-442.

Andersson, C. M., G. E. Bjaras, et al. (2003). "Health promotion activities in annual reports of local governments: 'Health for All' targets as a tool for content analysis." European Journal of Public Health 13(3): 255-9.

Andrade, L. O., I. C. Bareta, et al. (2005). "Public health policies as guides for local public policies: the experience of Sobral-Ceara, Brazil." Promotion & Education 2005(Supplement 3): 28-31.

Arnstein, S. (1969). "A ladder of citizen participation." Journal of the American Institute of Planners 35: 216-24.

Awofeso, N. (2004). "What's new about the "new public health"?" American Journal of Public Health 94(5): 705-9.

Baker, E. A., M. M. Metzler, et al. (2005). "Addressing Social Determinants of Health Inequities: Learning From Doing." Am J Public Health 95(4): 553-555.

Barnes, T. J. (2000a). "Pragmatism". In R. J. Johnston, D. Gregory, G. Pratt and M. Watts The Dictionary of Human Geography. Malden, MA: Blackwell Publishing. 632-4.

Barnes, T. J. (2000b). "Political Economy". In R. J. Johnston, D. Gregory, G. Pratt and M. Watts The Dictionary of Human Geography. Malden, MA: Blackwell Publishing. 593-4.

Barton, H. (2005). "A Health Map for Urban Planners: Towards a Conceptual Model for Healthy Sustainable Settlements." Built Environment 31(4): 339-55.

Barton, H., C. Mitcham, et al., Eds. (2003). Healthy urban planning in practice: experience of European cities. Copenhagen, Denmark, World Health Organization.

Barton, H. and C. Tsourou (2000). Healthy urban planning. London: Spon Press.

Baum, F. (2005). "Wealth and health: the need for more strategic public health research." Journal of Epidemiology and Community Health 59(7): 542-5.

Baxter, R. (1998). "The roles and responsibilities of local public health systems in urban health." Journal of Urban Health 75(2): 322-329.

Becker, D., K. B. Edmundo, et al. (2007). "Network of healthy communities of Rio de Janeiro--Brazil." Promotion & Education 14(2): 101-2.

Black, D., J. Morris, et al. (1980). Inequalities in Health: report for a Research Working Group. London: Department of Health and Social Security,

Boarnet, M. G. and L. M. Takahashi (2005). "Bridging the gap between urban health and urban planning". In S. Galea and D. Vlahov Handbook of Urban Health: Populations, Methods, and Practice. New York: Springer. 379-402.
Bowling, A. (1996). "Health care rationing: the public's debate." British Medical Journal 312(7032): 670-674.
Bressers, H. A. and L. J. O'Toole (1998). "The selection of policy instruments: A network-based perspective." Journal of Public Policy 18: 213-39.
Brimacombe, M., P. Chaulk, et al. (1998). PEI System Evaluation Project: Data Collection Instruments for Evaluating Health and Social Service Systems PEI Health and Community Services System.
Broughton, M. A., P. S. Janssen, et al. (2006). "Predictors and outcomes of household food insecurity among inner city families with preschool children in Vancouver." Canadian Journal of Public Health 97(3): 214-6.
Brown, L. (1998). "Urban health policy." Journal of Urban Health 75(2): 273-280.
Bullen, C. and M. Lyne (2006). "A survey of New Zealand's Territorial Local Authorities' policies, plans and programs promoting physical activity." Australia and New Zealand Journal of Public Health 30(4): 334-6.
Carrigg, D. (2009). Downtown Eastside costs $1 million a day: Huge price tag leads to call for audit. Vancouver, Vancouver Province. Feburary 16.
CBC (2006). Vancouver mayor wants 'civil city' by 2010. CBC News. Accessed: December 8. Last updated. http://www.cbc.ca/canada/british-columbia/story/2006/11/27/bc-sullivan.html
CBC (2007). Surrey mayor unveils crime-prevention program. CBC News. Accessed: December 8. Last updated. http://www.cbc.ca/canada/british-columbia/story/2007/02/26/surrey-crime.html
CBC (2008a). Vancouver residential property tax up 3 per cent: Prepare for bigger hikes in 2009, warns opposition councillor. CBC News. Accessed: December 5. Last updated. http://www.cbc.ca/canada/british-columbia/story/2008/04/16/bc-vancouver-tax-hikes.html
CBC (2008b). Robertson makes homelessness his first priority as Vancouver mayor. CBC News. Accessed: March 16. Last updated: November 15, 2008. http://www.cbc.ca/canada/british-columbia/story/2008/11/15/bc-vancouver-mayor-election-results.html
CCHS (2000). Canadian Community Health Survey (CCHS): Questionnaire for Cycle 1.1. Ottawa, Ontario: Statistics Canada, 130.
Chai, S. K., W. O. Robertson, et al. (2001). "Pediatric environmental health: perceptions from a survey questionnaire." International Journal of Occupational & Environmental Health 7(1): 37-43.
Christoff, S. and S. Kalache (2007). The Poorest Postal Code: Vancouver's Downtown Eastside in Photos. The Dominion. Accessed: December 8. Last updated. http://www.dominionpaper.ca/articles/909
CIHI (2005). Select Highlights on Public Views of the Determinants of Health. Ottawa, ON: Canadian Institute for Health Information, 36.
City of Burnaby (1998). Official Community Plan for Burnaby. Department of Planning, City of Burnaby. Accessed: May. Last updated.

http://www.burnaby.ca/cityhall/departments/departments_planning/plnnng_plans/plnnng_plans_offclc.html
City of New Westminster (1998). The City of New Westminster Official Community Plan, Bylaw No. 6476. New Westminster, British Columbia: Department of Development Services, City of New Westminster, 18.
City of Richmond (1999). City of Richmond Official Community Plan. Department of Planning & Zoning, City of Richmond. Accessed: May. Last updated. http://www.richmond.ca/services/planning/ocp/sched1.htm
Clark, D. K. (2000). "The city government's role in community health improvement." Public Health Reports 115(2-3): 216-21.
Clark, G. L. and M. Dear (1984). State apparatus: structures and language of legitimacy. Boston: Allen & Unwin.
Clavel, P., J. Pitt, et al. (1997). "The community option in urban policy." Urban Affairs Review 32(4): 435-58.
Coburn, D. (1999). "Phases of capitalism, welfare states, medical dominance, and health care in Ontario." International Journal of Health Services 29(4): 833-851.
Coburn, D., K. Denny, et al. (2003). "Population health in Canada: A brief critique." American Journal of Public Health 93(3): 392-396.
Coburn, D. and B. Poland (1996). "The CIAR vision of the determinants of health: a critique." Canadian Journal of Public Health 87(5): 308-10.
Collins, P.A. (2004). Addressing the social determinants of health: Understanding the role of values as facilitators and barriers to action. Clinical Health Sciences - Health Research Methodology. Hamilton, ON, McMaster University: 143.
Collins, P. A., J. Abelson, et al. (2007). "Knowledge into action?: Understanding ideological barriers to addressing health inequalities at the local level." Health Policy 80(1): 158-71.
Collins, P. A. and M. V. Hayes (2007). "Twenty years since Ottawa and Epp: researchers' reflections on challenges, gains and future prospects for reducing health inequities in Canada." Health Promotion International 22(4): 337-345.
Collins, P. A., M. V. Hayes, et al. (2009). "Neighbourhood quality and self-rated health: A survey of eight suburban neighbourhoods in the Vancouver Census Metropolitan Area." Health & Place 15: 156-64.
Corburn, J. (2004). "Confronting the challenges in reconnecting urban planning and public health." American Journal of Public Health 94(4): 541-546.
CPHI (2006). Improving the Health of Canadians: An Introduction to Health in Urban Places. Ottawa, ON: Canadian Population Health Initiative, Canadian Institute for Health Information, 143.
Crabtree, B. F. and W. L. Miller (1999). "Using Codes and Code Manuals". In B. F. Crabtree and W. L. Miller Doing Qualitative Research. Thousand Oaks, CA: Sage Publications. 163-177.
Davidson, A. R. (1999). "British Columbia's health reform: "new directions" and accountability." Canadian Journal of Public Health 90(Supplement 1): S35-8.

Davis, K. and D. Sandman (1998). "Economics and urban health." Journal of Urban Health 75(2): 281-293.
De Vogli, R., R. Mistry, et al. (2005). "Has the relation between income inequality and life expectancy disappeared? Evidence from Italy and top industrialised countries." Journal of Epidemiology and Community Health 59(2): 158-162.
DHHS (2000). Healthy People 2010: Understanding and Improving Health. Washington, DC: U.S. Department of Health and Human Services, 76.
DHHS (2001). Healthy people in healthy communities: A community planning guide using Healthy People 2010. Washington, D.C.: U.S. Department of Health and Human Services, 44.
Diez-Roux, A. V., F. J. Nieto, et al. (1997). "Neighborhood Environments and Coronary Heart Disease: A Multilevel Analysis." American Journal of Epidemiology 146(1): 48-63.
Dillman, D. A. (2000). Mail and Internet Surveys: The Tailored Design Method. New York: John Wiley & Sons, Inc.
Dillman, D. A., G. Phelps, et al. (2009). "Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet." Social Science Research 38(1): 1-18.
Donchin, M., A. A. Shemesh, et al. (2006). "Implementation of the Healthy Cities' principles and strategies: an evaluation of the Israel Healthy Cities network." Health Promotion International 21(4): 266-73.
Dressendorfer, R. H., K. Raine, et al. (2005). "A conceptual model of community capacity development for health promotion in the Alberta Heart Health Project." Health Promotion & Practice 6(1): 31-6.
Duhl, L. J. (1996). "An ecohistory of health: the role of 'healthy cities'." American Journal of Health Promotion 10(4): 258-61.
Duhl, L. J. and A. K. Sanchez (1999). Healthy cities and the city planning process. Copenhagen, DK: World Health Organization, 43.
Dunn, J. R. (2006). "Speaking theoretically about population health." Journal of Epidemiology and Community Health 60(7): 572-3.
Dunn, J. R. and M. V. Hayes (1999). "Toward a lexicon of population health." Canadian Journal of Public Health 90(Supplement 1): 7-10.
Ehrenreich, B. and D. English (1973). Complaints and Disorders: The Sexual Politics of Sickness. New York: City University of New York.
Elliott, S. J., S. M. Taylor, et al. (2000). "Restructuring public health in Ontario: Implications for heart health promotion." Canadian Journal of Public Health 91(2): 94-7.
Evans, R. (2002). Interpreting and Addressing Inequalities in Health: From Black to Acheson to Blair to...? London: Office of Health Economics.
Evans, R. G., M. L. Barer, et al. (1994). Why are Some People Healthy and Others Not? The Determinants of Health of Populations. New York: Aldine de Gruyter.
Evans, R. G. and G. Stoddart (1990). "Producing health, consuming health care." Social Science & Medicine 31(12): 1347-1363.

Evans, R. G. and G. Stoddart (2003). "Consuming research, producing policy?" American Journal of Public Health 93(3): 371-379.
Fafard, P. (2008). Evidence and Healthy Public Policy: Insights from Health and Political Sciences. Quebec City, Quebec: National Collaborating Centre for Healthy Public Policy and Canadian Policy Research Networks, 33.
FCM (2005). Quality of Life in Canadian Communities: Growth, the Economy, and the Urban Environment. Ottawa: Federation of Canadian Municipalities, 40.
FCM (2006). Building Prosperity from the Ground Up: Restoring Municipal Fiscal Imbalance. Ottawa: Federation of Canadian Municipalities, 100.
FCM (2008a). Policy Statement on Municipal Finance and Intergovernmental Arrangements. Ottawa, ON: Federation of Canadian Municipalities, 90.
FCM (2008b). Policy Statement on Environmental Issues and Sustainable Development. Ottawa, ON: Federation of Canadian Municipalities, 90.
Ferguson, D. (2007). New Canadian crime rate figures released. Surrey, BC, Surrey Leader. July 20.
Finerman, R. and L. A. Bennett (1995). "Guilt Blame and Shame: Responsibility in Health and Sickness." Social Science and Medicine 40(1): 1-3.
Fischer, G. B. (2006). "Asthma in urban setting: a southern American perspective." Paediatr Respir Rev 7(Supplement 1): S117-8.
Flynn, B. C. (1996). "Healthy cities: Toward worldwide health promotion." Annual Review of Public Health 17.
Flynn, B. C., D. W. Ray, et al. (1994). "Empowering communities: action research through healthy cities." Health Education Quarterly 21(3): 395-405.
Fone, D., A. Jones, et al. (2002). "Using local authority data for action on health inequalities: the Caerphilly Health and Social Needs Study." British Journal of General Practice 52(483): 799-804.
Ford, E. S. and A. H. Mokdad (2008). "Epidemiology of obesity in the Western Hemisphere." J Clin Endocrinol Metab 93(11 Supplement 1): S1-8.
Forde, I. and R. Raine (2008). "Placing the individual within a social determinants approach to health inequity." The Lancet 372(9650): 1694-1696.
FPT-ACPH (1996). First Report on the Health of Canadians. Federal, Provincial and Territorial Advisory Committee on Population Health, Health Canada, 67.
FPT-ACPH (1999). Toward a Healthy Future: Second Report on the Health of Canadians. Ottawa, ON: Federal Provincial and Territorial Advisory Committee on Population Health, Health Canada.
Frank, L. D., M. A. Andresen, et al. (2004). "Obesity relationships with community design, physical activity, and time spent in cars." American Journal of Preventive Medicine 27(2): 87-96.
Frank, L. D., P. O. Engelke, et al. (2003). "Chapter Two: Public Health and Urban Form in America". In L. D. Frank, P. O. Engelke and T. L. Schmid Health and Community Design. Washington: Island Press. 11-37.
Frankfort-Nachmias, C. and D. Nachmias (2000). Research methods in the social sciences. New York: Worth.

Frankish, J., G. Veenstra, et al. (1999). "Population Health in Canada: Issues and Challenges for Policy, Practice and Research." Canadian Journal of Public Health 90(Supplement 1): S71-72.
Freudenberg, N. (2000). "Time for a national agenda to improve the health of urban populations." American Journal of Public Health 90(6): 837-840.
Friedmann, J. (1987). Planning in the Public Domain: From Knowledge to Action. Princeton, New Jersey: Princeton University Press.
Friendly, M. (2004). "Early Childhood Education and Care". In D. Raphael Social Determinants of Health: Canadian Perspectives. Toronto: Canadian Scholars Press Inc. 109-23.
Frohlich, K. L., N. Ross, et al. (2006). "Health disparities in Canada today: Some evidence and a theoretical framework." Health Policy 79(2-3): 132-43.
Frumkin, H. (2002). "Urban sprawl and public health." Public Health Reports 117(3): 201-17.
Frumkin, H., L. Frank, et al. (2004). "Chapter 2: The Origins of Sprawl". In H. Frumkin, L. Frank and R. Jackson Urban Sprawl and Health: Designing, Planning and Building for Healthy Communities. Washington: Island Press. 26-42.
Fulop, N. and J. Elston (2000). "Lessons for health strategies in Europe - The evaluation of a national health strategy in England." European Journal of Public Health 10(1): 11-17.
Galea, S., J. Ahern, et al. (2005). "Urban built environment and depression: a multilevel analysis." Journal of Epidemiology & Community Health 59(10): 822-7.
Galea, S., J. Ahern, et al. (2007). "Neighborhood Income and Income Distribution and the Use of Cigarettes, Alcohol, and Marijuana." American Journal of Preventive Medicine 32(6, Supplement 1): S195-S202.
Galea, S., N. Freudenberg, et al. (2005). "Cities and population health." Social Science & Medicine 60(5): 1017-1033.
Galea, S. and D. Vlahov (2005a). "Epidemiology and urban health research". In S. Galea and D. Vlahov Handbook of Urban Health: Populations, Methods, and Practice. New York: Springer. 259-76.
Galea, S. and D. Vlahov (2005b). "Urban health: Evidence, challenges, and directions." Annual Review of Public Health 26(1): 341-65.
Gardner, C., N. Arya, et al. (2005). "Can a health unit take action on the determinants of health?" Canadian Journal of Public Health 96(5): 374-9.
Geronimus, A. (2000). "To mitigate, resist, or undo: addressing structural influences on the health of urban populations." American Journal of Public Health 90(6): 867-872.
Glouberman, S., M. Gemar, et al. (2006). "A framework for improving health in cities: a discussion paper." Journal of Urban Health 83(2): 325-38.
Goldstein, G. (2000). "Healthy cities: overview of a WHO international program." Rev Environ Health 15(1-2): 207-14.
Goodwin, M. (2004). "Recovering the future: a post-disciplinary perspective on geography and political economy". In P. Cloke, P. Crang and M. Goodwin Envisioning Human Geographies. London: Arnold Publishers. 65-80.

Government of BC (2008). Official Community Plans. Local Government Department, Ministry of Community Development, Government of British Columbia. Accessed: December 8. Last updated. http://www.cd.gov.bc.ca/lgd/planning/official_community_plans.htm
Government of Canada (2006). Restoring Fiscal Balance in Canada: Focusing on Priorities. Ottawa, ON: Department of Finance, Government of Canada, 125.
Grace, V. M. (1991). "The Marketing of Empowerment and the Construction of the Health Consumer: A Critique of Health Promotion." International Journal of Health Services 21(2): 329-43.
Gracey, M. (2002). "Child health in an urbanizing world." Acta Paediatr 91(1): 1-8.
Greene, J. C., V. J. Caracelli, et al. (1989). "Toward a conceptual framework for mixed-method evaluation designs." Educational Evaluation and Policy Analysis 11: 255-274.
Greenhalgh, T. (2004). "Meta-narrative mapping: a new approach to the systematic review of complex evidence". In B. Hurwitz, T. Greenhalgh and V. Skultans Narrative Research in Health and Illness. Malden, Mass: BMJ Books. 349-81.
Gregory, D. (2000a). "Humanistic geography". In R. J. Johnston, D. Gregory, G. Pratt and M. Watts The Dictionary of Human Geography. Malden, MA: Blackwell Publishing. 361-4.
Gregory, D. (2000b). "Structuralism". In R. J. Johnston, D. Gregory, G. Pratt and M. Watts The Dictionary of Human Geography. Malden, MA: Blackwell Publishing. 797-8.
Guldbrandsson, K., S. Bremberg, et al. (2005). "What makes things happen? An analysis of the development of nine health-promoting measures aimed at children and adolescents in three Swedish municipalities." Social Science & Medicine 61(11): 2331-44.
GVRD (1996). Livable Region Strategic Plan. Burnaby: Greater Vancouver Regional District, 35.
GVRD (2001a). GVRD Land Use by Municipality. Greater Vancouver Regional District Policy. Accessed: April 3. Last updated. http://www.gvrd.bc.ca/growth/keyfacts/landusebymuni.htm
GVRD (2001b). AVERAGE Household Income $, 1991-1996 -2001 Census. Greater Vancouver Regional District. Accessed: April 3. Last updated. http://www.gvrd.bc.ca/growth/keyfacts/avehhdinc.htm
Hancock, T. (1987). "Healthy Cities: the Canadian project." Health Promotion 26(1): 2-4.
Hancock, T. (1993). "The evolution, impact and significance of the healthy cities/healthy communities movement." Journal of Public Health Policy 14(1): 5-18.
Hancock, T. (2001). "People, partnerships and human progress: building community capital." Health Promotion International 16(3): 275-280.
Hancock, T. and L. J. Duhl (1988). Promoting Health in the Urban Context. Copenhagen, Denmark: FADL Publishers.

Hancock, T., R. Labonte, et al. (1999). "Indicators that count! Measuring population health at the community level." Canadian Journal of Public Health 90(Supplement 1): 22-6.
Harvey, D. (1973). Social Justice and the City. Baltimore, MD: Johns Hopkins University Press.
Harvey, D. (2001). Spaces of Capital: Towards a Critical Geography. New York: Routledge.
Hasson, S. and D. Ley (1994). "The Downtown Eastside: One hundred years of struggle." In H. S and L. D Neighbourhood Organisations and the Welfare State. Toronto: University of Toronto Press.
Hayden, D. (2006). "Building the American Way: Public Subsidy, Private Space". In S. Low and N. Smith The Politics of Public Space. New York: Routledge. 35-48.
Hayes, M. V. (1999a). "Man, disease and environmental associations': from medical geography to health inequalities." Progress in Human Geography 23(2): 289-96.
Hayes, M. V. (1999b). "Population health promotion: Responsible sharing of future directions." Canadian Journal of Public Health 90(Supplement 1): S15-17.
Hayes, M. V. (2006). The tendency for UK researchers to conflate 'health inequalities' and 'health inequities'. Personal communication. P. A. Collins, December 1st.
Hayes, M. V. (2009). Aldergrove - Low Density, Social Inequities. Personal Communication. P. A. Collins, February 12, 2009.
Hayes, M. V. and J. R. Dunn (1998). Population health in Canada: A systematic review. Ottawa, ON: Canadian Policy Research Networks,
Hayes, M. V. and S. M. Willms (1990). "Healthy community indicators: the perils of the search and the paucity of the find." Health Promotion International 5(2): 161-166.
Health Canada (2001). The Population Health Template: Key Elements and Actions that Define a Population Health Approach. Health Canada. Accessed: November 24, 2006. Last updated. http://www.phac-aspc.gc.ca/ph-sp/phdd/determinants/index.html
Health Canada (2003). Partnership with the Voluntary Sector: Building Stronger Partnerships. Health Canada. Accessed: December 2. Last updated: 2003-02-18. http://www.phac-aspc.gc.ca/vs-sb/voluntarysector/
Hertzman, C. (2009). Knowledge Translation Initiatives by HELP with Metro Vancouver Municipalities. Personal Communication. P. A. Collins, February 1, 2009.
Heymann, J., C. Hertzman, et al., Eds. (2006). Healthier societies : from analysis to action. New York, Oxford University Press.
Hodge, G. (1998). "Chapter 9: Implementing the Community Plan by Land-Use Regulation". In G. Hodge Planning Canadian Communities: An Introduction to the Principles, Practice, and Participants. Toronto: ITP Nelson. 241-80.

Howlett, M. and M. Ramesh (2003). Studying public policy: policy cycles and policy subsystems. Don Mills: Oxford University Press.
Hume, M. (2006). Suburbs can't escape city's disturbing trend: Homelessness no longer restricted to downtown core. Vancouver, The Globe & Mail. December 6.
HWC (1986). Achieving Health for All: A Framework for Health Promotion. Ottawa, ON: Health and Welfare Canada.
Iannantuono, A. and J. Eyles (1999). "Environmental health metanarratives: an analysis of policy making in Ontario, Canada." Health & Place 5(2): 139-56.
Jones, E. (2002). Toward Healthy Cities: Developing the Relationship Between Municipalities and Regional Health Authorities. Calgary, AB: Canada West Foundation, 22.
Jones, K. and G. Moon (1987). Health, disease and society: A critical medical geography. London: Routledge.
Jorm, A. F., A. E. Korten, et al. (1997). ""Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment." Medical Journal of Australia 166(8): 182-6.
Kaplan, G. (1998). "Socioeconomic considerations in the health of urban areas." Journal of Urban Health 75(2): 228-235.
Kaplan, G. A. (2004). "What's wrong with Social Epidemiology, and how can we make it better?" Epidemiologic Reviews 26(1): 124-135.
Kaplowitz, M. D., T. D. Hadlock, et al. (2004). "A Comparison of Web and Mail Survey Response Rates." Public Opinion Quarterly 68(1): 94-101.
Kawachi, I. and B. P. Kennedy (1997). "The relationship of income inequality to mortality: does the choice of indicator matter?" Social Science & Medicine 45: 1121-27.
Kearns, R. and G. Moon (2002). "From medical to health geography: Novelty, place and theory after a decade of change." Progress in Human Geography 26(5): 605-625.
Kennedy, L. A. (2001). "Community involvement at what cost?--local appraisal of a pan-European nutrition promotion programme in low-income neighbourhoods." Health Promotion International 16(1): 35-45.
Kenzer, M. (2000). "Healthy Cities: a guide to the literature." Public Health Reports 115(2-3): 279-89.
Kershaw, P., L. Irwin, et al. (2006). New Knowledge about Nurturing Neighbourhoods: The BC Atlas of Child Development. Vancouver: Human Early Learning Partnership,
Kingdon, J. W. (1995). Agendas, Alternatives and Public Policies. New York: Longman.
Knox, P. and S. Pinch (2000). Urban Social Geography: An Introduction. London: Longman.
Kozyrskyj, A. L., P. Fergusson, et al. (2002). "Community resources and determinants of the future health of Manitobans." Canadian Journal of Public Health 93(Supplement 2): S70-6.

Krieger, N., M. Northridge, et al. (2003). "Assessing health impact assessment: multidisciplinary and international perspectives." Journal of Epidemiology and Community Health 57(9): 659-62.
Labonte, R. (1993). "A holosphere of healthy and sustainable communities." Australian Jounal of Public Health 17(1): 4-12.
Labonte, R. (1995). "Population health and health promotion: what do they have to say to each other?" Canadian Journal of Public Health 86(3): 165-8.
Lalonde, M. (1974). A New Perspective on the Health of Canadians: A Working Document. Ottawa: Government of Canada, 77.
Laverack, G. and R. Labonte (2000). "A planning framework for community empowerment goals within health promotion." Health Policy and Planning 15(3): 255-62.
Lavis, J. (2002). "Ideas At The Margin Or Marginalized Ideas? Nonmedical Determinants Of Health In Canada." Health Affairs 21(2): 107-112.
Lavis, J., F. Posada, et al. (2004). "Use of research to inform public policymaking." The Lancet 364(9445): 1615-21.
Lavis, J., D. Robertson, et al. (2003). "How Can Research Organizations More Effectively Transfer Research Knowledge to Decision Makers?" The Milbank Quarterly 81(2): 221-248.
Lavis, J., S. Ross, et al. (2003). "Do Canadian civil servants care about the health of populations?" American Journal of Public Health 93(4): 658-63.
Lavis, J. N., M. S. R. Farrant, et al. (2001). "Barriers to employment-related healthy public policy in Canada." Health Promotion International 16(1): 9-20.
Lawrence, R. J. (2002). "Inequalities in urban areas: innovative approaches to complex issues." Scandinavian Journal of Public Health 30(Supplement 59): 34-40.
Ledyaev, V. (1997). Power: a conceptual analysis. Commack, NY: Nova Science Publishers.
Lees, A., N. Scott, et al. (2002). "Deciding how NHS money is spent: a survey of general public and medical views." Health Expectations 5(1): 47-54.
Lindblom, C. (1956). "The Science of Muddling Through." Public Administration Review 19(2): 79-88.
Lomas, J., J. Woods, et al. (1997). "Devolving authority for health care in Canada's provinces: 1. An introduction to the issues." Canadian Medical Association Journal 156(3): 371-7.
Lopez, R. P. and H. P. Hynes (2006). "Obesity, physical activity, and the urban environment: public health research needs." Environmental Health 5(25): 1-10.
Love, M. B. and Q. Thurman (1991). "Normative beliefs about factors that affect health and longevity." Health Education Quarterly 18(2): 183-194.
Low, S. (2006). "How Private Interests Take Over Public Space: Zoning, Taxes, and Incorporation of Gated Communities". In S. Low and N. Smith The Politics of Public Space. New York: Routledge. 81-103.

Lundberg, O., M. Å. Yngwe, et al. (2008). "The role of welfare state principles and generosity in social policy programmes for public health: an international comparative study." The Lancet 372(9650): 1633-1640.
Lynch, J. W., G. A. Kaplan, et al. (1998). "Income inequality and mortality in metropolitan areas in the United States." American Journal of Public Health 88(7): 1074-80.
Majone, G. (1989). Evidence, argument, and persuasion in the policy process. New Haven: Yale University Press.
Manor, O., S. Matthews, et al. (1997). "Comparing measures of health inequality." Social Science & Medicine 45: 761-71.
Marmot, M. (1997). "Early Life and adult disorder: research themes." British Medical Bulletin 53(1): 3-9.
Marmot, M. (2004). The Status Syndrome: How Social Standing Affects Our Health and Longevity. New York, NY: Henry Holt.
Marmot, M., C. D. Ryff, et al. (1997). "Social inequalities in health: next questions and converging evidence." Social Science & Medicine 44: 901-10.
Marmot, M., G. D. Smith, et al. (1991). "Health inequalities among British civil servants: the Whitehall II study." The Lancet 337(8754): 1387-93.
Massett, H. A., M. Greenup, et al. (2003). "Public perceptions about prematurity: a national survey." American Journal of Preventive Medicine 24(2): 120-127.
McCall, D. S., I. Rootman, et al. (2005). "International School Health Network: an informal network for advocacy and knowledge exchange." Promotion & Education 12(3-4): 173-7.
McCarthy, M. (2002). "Urban development and health inequalities." Scandinavian Journal of Public Health 30(Supplement 59): 59-62.
McKeown, T. (1979). The Role of Medicine: Dream, Mirage, or Nemesis? Oxford: Basil Blackwell Ltd.
McMichael, A. J. (2000). "The urban environment and health in a world of increasing globalization: issues for developing countries." Bull World Health Organ 78(9): 1117-26.
Mendes, R. and F. Falvo (2007). "Motuca healthy municipality project: building together a better future." Promotion & Education 14(2): 81-2.
Metro Vancouver (2006). 2006 Census Bulletin #2: Census of Agriculture. Burnaby, BC: The Sustainable Region Initiative, Metro Vancouver, 11.
Metro Vancouver (2007). Metro Vancouver 2007 Assessments, Tax Rates, Municipal Taxes and Class Proportions of Taxes and Assessments. Metro Vancouver. Accessed: April 3. Last updated. http://www.gvrd.bc.ca/growth/keyfacts/munitax.htm
Metro Vancouver (2008). About Metro Vancouver. Metro Vancouver. Accessed: November 23, 2006. Last updated. http://www.gvrd.bc.ca/about/index.htm
Metro Vancouver (2009). Metro Vancouver 2040: Shaping our future. Burnaby, BC: Metro Vancouver, 58.
Miller, W. L. and B. F. Crabtree (1999). "The Dance of Interpretation". In B. F. Crabtree and W. L. Miller Doing Qualitative Research. Thousand Oaks, CA: Sage Publications. 127-143.

Mitchell, R. and F. Popham (2008). "Effect of exposure to natural environment on health inequalities: an observational population study." The Lancet 372(9650): 1655-1660.
Mittelmark, M. B. (2001). "Promoting social responsibility for health: health impact assessment and healthy public policy at the community level." Health Promotion International 16(3): 269-274.
Mokdad, A. H. (2009). "The Behavioral Risk Factors Surveillance System: Past, Present, and Future." Annual Review of Public Health 30(1).
Morse, J. M. (1995). "The Significance of Saturation." Qualitative Health Research 5(2): 147-9.
Moser, C. and G. Kalton (2004). "Chapter 9: Questionnaires". In C. Seale Social Research Methods: A Reader. New York: Routledge. 73-87.
Muller, J. H. (1999). "Narrative Approaches to Qualitative Research in Primary Care". In B. F. Crabtree and W. L. Miller Doing Qualitative Research. Thousand Oaks, CA: Sage Publications. 221-38.
Muntaner, C. (1999). "Teaching social inequalities in health: barriers and opportunities." Scandinavian Journal of Public Health 27(3): 161-5.
Navarro, V. (1999). "The Political Economy of the Welfare State in Developed Capitalist Countries." International Journal of Health Services 29(1): 1-50.
Northridge, M. E., E. D. Sclar, et al. (2003). "Sorting out the connections between the built environment and health: a conceptual framework for navigating pathways and planning healthy cities." Journal of Urban Health 80(4): 556-68.
Norusis, M. J. (2007). SPSS 15.0 advanced statistical procedures companion. Upper Saddle River, NJ: Prentice Hall.
Nutbeam, D. (1999). "Achieving population health goals: perspectives on measurement and implementation from Australia." Canadian Journal of Public Health 90(Supplement 1): S43-6.
O'Campo, P. and M. Yonas (2005). "Health of economically deprived populations in cities". In S. Galea and D. Vlahov Handbook of Urban Health: Populations, Methods, and Practice. New York: Springer. 43-61.
O'Neill, M. and A. Pederson (1994). "Two analytic paths for understanding Canadian developments in health promotion". In A. Pederson, M. O'Neill and I. Rootman Health Promotion in Canada: Provincial, National and International Perspectives. Toronto: W.B. Saunders Canada.
O'Neill, M. and P. Simard (2006). "Choosing indicators to evaluate Healthy Cities projects: a political task?" Health Promotion International 21(2): 145-52.
Ostry, A. (1994). "Theories of Disease Causation and their Impact on Public Health in 19th Century Canada." Canadian Journal of Public Health 85(6): 368-9.
Patton, M. Q. (2002). Qualitative evaluation and research methods. Thousand Oaks, CA: Sage Publications.
Paulsen, M. (2009). Historic hotel reopens to serve Vancouver's homeless. The Tyee. Accessed: March 16. Last updated: January 7, 2009.
Pearce, N. (1996). "Traditional epidemiology, modern epidemiology, and public health." American Journal of Public Health 86: 678-683.

Plumer, K. D. and A. Trojan (2004). "Healthy Cities - Requirements and Performance." Gesundheitswesen 66: 202-7.
Power, C. and C. Hertzman (1997). "Social and biological pathways linking early life and adult disease." British Medical Bulletin 53(1): 210-221.
Quigley, R. J. and L. C. Taylor (2004). "Evaluating health impact assessment." Public Health 118(8): 544-52.
Raphael, D. (2000). "Health inequalities in Canada: current discourses and implications for public health action." Critical Public Health 10(2): 193-216.
Raphael, D. (2003). "Bridging the gap between knowledge and action on the societal determinants of cardiovascular disease: how one Canadian community effort hit - and hurdled - the lifestyle wall." Health Education 103(3): 177-189.
Raphael, D., T. Bryant, et al., Eds. (2006). Staying alive: Critical perspectives on health, illness, and health care. Toronto, Canadian Scholars Press Inc.
Raphael, D. and E. S. Farrell (2002). "Beyond medicine and lifestyle: addressing the societal determinants of cardiovascular disease in North America." Leadership in Health Services 15(4): 1-4.
Reevely, D. (2003). RCMP seize drugs, car, cash in raid of 'Dial-a-dope' crack apartment. Vancouver, BC, The Vancouver Sun. January 27.
Renaud, L., J. O'Loughlin, et al. (2003). "The St-Louis du Parc Heart Health Project: a critical analysis of the reverse effects on smoking." Tobacco Control 12(3): 302-9.
Reutter, L., A. Neufeld, et al. (1999). "Public perceptions of the relationship between poverty and health." Canadian Journal of Public Health 90(1): 13-8.
Reutter, L. I., G. Veenstra, et al. (2005). "Lay understandings of the effects of poverty: a Canadian perspective." Health and Social Care in the Community 13(6): 514-30.
Robertson, A. (1998). "Shifting Discourses on Health in Canada: From Health Promotion to Population Health." Health Promotion International 13(2): 155-166.
Rockel, N. (2006). For richer and poorer: City faces the costs of a growing gap between haves and have-nots. Georgia Straight. Accessed: December 8. Last updated. http://www.straight.com/article/for-richer-and-poorer
Rolfsen, C. (2008). Dr. Penny Ballem: History of political controversy and professional excellence. Vancouver Sun. Accessed: March 16. Last updated: December 12, 2008. http://www.vancouversun.com/Sports/Penny+Ballem+History+political+controversy+professional+excellence/1069863/story.html
Rorty, R. (1998). Achieving our country: leftist thought in twentieth-century America. Cambridge, Mass: Harvard University Press.
Royer, C. (1998). "The state and local political environment of urban health." Journal of Urban Health 75(2): 294-299.
Rupp, G. (1998). "Toward healthy cities: opportunities for collaboration." Journal of Urban Health 75(2): 401-6.

Sabouraud, A. (1992). "A better prospect for city life." World Health Forum 13: 232-6.
Saelens, B. E., J. F. Sallis, et al. (2003). "Environmental correlates of walking and cycling: findings from the transportation, urban design, and planning literatures." Annals of Behavioral Medicine 25(2): 80-91.
Salant, P. and D. A. Dillman (1994). How to Conduct Your Own Survey. New York: John Wiley & Sons, Inc.
Sancton, A. (2000). "The Municipal Role in the Governance of Canadian Cities". In T. Bunting and P. Filion Canadian cities in transition: the twenty-first century. Don Mills: Oxford University Press. 425-442.
Sancton, A. (2005). "The governance of metropolitan areas in Canada." Public Administration and Development 25(4): 317-327.
Savitch, H. V. and P. Kantor (2002). Cities in the international marketplace: the political economy of urban development in North America and West Europe. Princeton, NJ: Princeton University Press.
Schneider, A. and H. Ingram (1990). "Behavioral assumptions of policy tools." Journal of Politics 52(2): 510-29.
Schulz, A. and M. E. Northridge (2004). "Social Determinants of Health: Implications for Environmental Health Promotion." Health Education & Behavior 31(4): 455-71.
Simmons, J. and L. S. Bourne (2003). "New fault lines? Recent trends in the Canadian urban system and their implications for planning and public policy." Canadian Journal of Urban Research 12(1): 22-47.
Simon, P. A., C. M. Wold, et al. (2001). "Meeting the data needs of a local health department: the Los Angeles County Health Survey." American Journal of Public Health 91(12): 1950-2.
Smith, N. (2000). "Marxist geography". In R. J. Johnston, D. Gregory, G. Pratt and M. Watts The Dictionary of Human Geography. Malden, MA: Blackwell Publishing. 485-92.
Soroka, S. N. (2002). Agenda-setting dynamics in Canada. Vancouver: UBC Press.
Stachenko, S. (1996). "The Canadian Heart Health Initiative: dissemination perspectives." Canadian Journal of Public Health 87(Supplement 2): S57-9.
Statistics Canada (2006). GVRD Population and Private Dwellings. Statistics Canada. Accessed: April 3. Last updated. http://www.gvrd.bc.ca/growth/keyfacts/census2006popdwell.htm
Statistics Canada (2007). Population. Statistics Canada. Accessed: March 4. Last updated: September 7, 2007.
Stevens, G. A., R. H. Dias, et al. (2008). "The effects of 3 environmental risks on mortality disparities across Mexican communities." Proc Natl Acad Sci 105(44): 16860-5.
Stevenson, K. (2006). 1900-2000: Changes in Life Expectancy in the United States. ElderWeb. Accessed: January 7. Last updated. http://www.elderweb.com/home/node/2838

St-Hilaire, F. (2005). Fiscal Gaps and Imbalances: The New Fundamentals of Canadian Federalism. Montreal: Institute for Research on Public Policy, 19.
Stoddart, G., J. Eyles, et al. (2006). "Reallocating Resources across Public Sectors to Improve Population Health". In C. Hertzmann, S. Heymann, M. Barer and R. Evans Healthier Societies: From Analysis to Action. Oxford: Oxford University Press. 327-47.
Stone, C. N. (1989). Regime politics: governing Atlanta, 1946-1988. Lawrence, Kansas: University Press of Kansas.
Stone, D. (2002). Policy Paradox: The Art of Political Decision Making. New York: W.W. Norton & Company.
Streiner, D. L. and G. R. Norman (1995). Health measurement scales: a practical guide to their development and use. Oxford: Oxford University Press.
Streiner, D. L. and G. R. Norman (1998). PDQ Epidemiology. Hamilton, ON: BC Decker Inc.
Surjadi, C. (2002). "Sustainable Development, Agenda 21, and Healthy Cities." Spectrum 80(6): 356-8.
Szreter, S. (2003). "The population health approach in historical perspective." American Journal of Public Health 93(3): 421-431.
Takano, T., Ed. (2003). Healthy cities and urban policy research. London, Spon Press.
Tashakkori, A. and C. Teddlie (1998). Mixed Methodology: Combining Qualitative and Quantitative Approaches. Thousand Oaks, CA: Sage Publications.
Taylor, P. S. (2008). Daycare dilemma: Private operators are under attack, despite the shortage of spaces. McLean's.
Thabane, L. (2003). Sample Size Calculations and Survey Scale Development. P. Collins, July 22.
Tomes, N. (1998). The Gospel of Germs: Men, Women, and the Microbe in American Life. Cambridge, MASS: Harvard University Press.
Townson, M. (1999). Health and wealth: how social and economic factors affect our well-being. Toronto, ON: J. Lorimer.
Tricco, A. C., V. Runnels, et al. (2008). "Shifts in the use of population health, health promotion, and public health: a bibliometric analysis." Canadian Journal of Public Health 99(6): 466-71.
Tsouros, A. D. (2000). "Why urban health cannot be ignored: the way forward." Rev Environ Health 15(1-2): 267-71.
Utzinger, J. and J. Keiser (2006). "Urbanization and tropical health--then and now." Ann Trop Med Parasitol 100(5-6): 517-33.
Villeneuve, P. and A.-M. Seguin (2000). "Power and Decision-Making in the City: Political Perspectives". In T. Bunting and P. Filion Canadian cities in transition: the twenty-first century. Don Mills: Oxford University Press. 544-564.
Vlahov, D. and S. Galea (2003). "Urban health: a new discipline." The Lancet 362(9390): 1091-1092.

Vonn, M. (2004). Safe Streets - Laws for us, laws for them. Vancouver: British Columbia Civil Liberties Association, 1. http://www.bccla.org/othercontent/04safestreetsvonn.htm
Wallerstein, N. (2002). "Empowerment to reduce health disparities." Scandinavian Journal of Public Health 30(Supplement 59): 72-7.
Watt, R. G. (2005). "Strategies and approaches in oral disease prevention and health promotion." Bulletin of the World Health Organization 83(9): 711-8.
Weinehall, L., G. Hellsten, et al. (2001). "Prevention of cardiovascular disease in Sweden: the Norsjo community intervention programme--motives, methods and intervention components." Scandinavian Journal of Public Health 56: 13-20.
Welch, D. and S. Kneipp (2005). "Low-income housing policy and socioeconomic inequalities in women's health: the importance of nursing inquiry and intervention." Policy Polit Nurs Pract 6(4): 335-42.
Wermuth, L. (2003). Global inequality and human needs : health and illness in an increasingly unequal world. Boston, MA: Allyn and Bacon.
Whiteside, M. (2004). "The challenge of interdisciplinary collaboration in addressing the social determinants." Australian Social Work 57(4): 381-93.
WHO (1986). Ottawa Charter for Health Promotion. Ottawa: World Health Organization, Health and Welfare Canada, Canadian Public Health Association, 5.
Wilkins, R., M. Tjepkema, et al. (2008). "The Canadian census mortality follow-up study, 1991 through 2001." Health Reports 19(3): 25-43.
Wilkinson, R. (1996). Unhealthy Societies: The Afflictions of Inequality. London: Routledge.
Wilkinson, R. (2005). The Impact of Inequality: How to Make Sick Societies Healthier. New York, NY: The New Press.
Wilkinson, R. and M. Marmot (2003). Social Determinants of Health: The Solid Facts. Denmark: World Health Organization,
Wilkinson, R. G. (1992). "Income distribution and life expectancy." British Medical Journal 304: 165-8.
Wistow, G. (2001). "Modernisation, the NHS Plan and healthy communities." Journal of Managed Medicine 15(4-5): 334-51.
Yajima, S., T. Takano, et al. (2001). "Effectiveness of a community leaders' programme to promote healthy lifestyles in Tokyo, Japan." Health Promotion International 16(3): 235-43.
Yang, Q., Y. Chen, et al. (2004). "Association between particulate air pollution and first hospital admission for childhood respiratory illness in Vancouver, Canada." Archives of Environmental Health 59(1): 14-21.
Yassi, A., N. Fernandez, et al. (2003). "Community participation in a multisectoral intervention to address health determinants in an inner-city community in central Havana." Journal of Urban Health 80(1): 61-80.
Young, T. K. (2005). Population Health: Concepts and Methods. New York: Oxford University Press.