BUILDING A HEALTHY CITY FOR ALL: EXPLORING THE CREATION AND IMPLEMENTATION OF A HEALTHY PLANNING AND DEVELOPMENT TOOLKIT

Lessons for Vancouver from Four International Case Studies

by

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B.A., The University of British Columbia, 2009

A PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS (PLANNING)

in

THE FACULTY OF GRADUATE STUDIES

School of Community and Regional Planning

We accept this project as conforming to the required standard

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THE UNIVERSITY OF BRITISH COLUMBIA
April 2013
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Acknowledgments

This project would not have been possible without the support of many individuals.

My deepest gratitude goes to Ali Grant, Tanya Fink and Deb Anderson Eng at City of Vancouver Social Policy for giving me the opportunity to carry out this research and for continually inspiring me with your passion for what you do.

My sincere thanks to Professor Nora Angeles, my advisor at the School of Community and Regional Planning, for sharing your valuable insights and for challenging and encouraging me.

Special thanks to my family and friends for supporting me and for the laughter and good times when I needed a break.

And an extra special thanks to Trev, for your unconditional love and support through my entire academic journey.
# Table of Contents

List of figures and tables ........................................................................................................ 1
List of appendices .................................................................................................................. 2
Acronyms .............................................................................................................................. 3
Executive Summary ................................................................................................................ 4

1. INTRODUCTION: PURPOSE, OBJECTIVES AND METHODS FOR THIS STUDY ........... 6

2. BACKGROUND AND CONTEXT .................................................................................. 8
   Definitions of health and well-being .................................................................................. 9
   Evolving ideas of public health and planning .................................................................... 12
   Taking a holistic approach to planning through health .................................................... 15
   Measuring health impacts of planning and development .................................................. 17

3. CONTEXT FOR HEALTHY PLANNING & DEVELOPMENT IN VANCOUVER ........... 19
   Sustainability .................................................................................................................... 19
   Social Sustainability ......................................................................................................... 19
   Healthy City Strategy ....................................................................................................... 20
   Greenest City 2020 ........................................................................................................... 22
   Economic Action Strategy ............................................................................................... 22
   Partnership with Vancouver Coastal Health ....................................................................... 23
   Downtown Eastside Social Impact Assessment .................................................................. 24
   Health Considerations in the Development Application Process ....................................... 25

4. HEALTHY URBAN PLANNING AND DEVELOPMENT TOOLS: FOUR CASES .......... 26
   Case Study: San Francisco Sustainable Communities Index ........................................... 31
   Case Study: Philadelphia Health Impact Assessment and Healthy Planning Toolbox ........ 38
   Case Study: Region of Peel Healthy Development Index and Health Background Study Framework ........................................................................................................ 44
   Case Study: New South Wales Healthy Urban Development Checklist ............................. 49

5. ANALYSIS AND DISCUSSION ..................................................................................... 56
   Addressing the social determinants of health through healthy planning and development tools . 56
   Key themes and lessons from case studies ......................................................................... 57
   City of Vancouver strengths and opportunities .................................................................. 65
6. RECOMMENDATIONS ........................................................................................................67
7. CONCLUSION ....................................................................................................................70
8. REFERENCES ..................................................................................................................71
9. APPENDICES ..................................................................................................................78
List of figures and tables

FIGURE 1: THREE PILLARS OF SUSTAINABILITY .............................................................................................................7
FIGURE 3: MODEL OF HEALTH AND THE COMMUNITY ECOSYSTEM (HANCOCK, 1993). ..........................................16
FIGURE 4: STAGES IN HEALTH IMPACT ASSESSMENT (WHO, 2013C). ........................................................................18
FIGURE 5: BUILDING BLOCKS OF A HEALTHY CITY FOR ALL – CITY OF VANCOUVER'S DRAFT HEALTHY CITY STRATEGY (SOURCE: CITY OF VANCOUVER, 2013A) ........................................................................................................21
FIGURE 7: SAN FRANCISCO SUSTAINABLE COMMUNITIES INDEX (SCI) – HOUSING OBJECTIVES AND INDICATORS (SUSTAINABLE COMMUNITIES COLLECTIVE, 2012C). ....................................................................................................................34
FIGURE 8: OBJECTIVE H.1 UNDER HOUSING CRITERIA IN SCI HEALTHY DEVELOPMENT CHECKLIST (SUSTAINABLE COMMUNITIES COLLECTIVE, 2012D, P.14). .......................................................................................................................35
FIGURE 10: PHILATOOL – HEALTHY FOOD ACCESS OBJECTIVES AND INDICATORS (CITY OF PHILADELPHIA, 2011C). 41
FIGURE 12: HEALTHY DEVELOPMENT INDEX – PROXIMITY TO A VARIETY OF SERVICES (CREDIT) UNDER SERVICE PROXIMITY ELEMENT (CRICH, 2009, P.109) .......................................................................................................................46

TABLE 1: POLICY FRAMEWORK AND SOCIO-DEMOGRAPHIC PROFILES OF VANCOUVER AND CASE STUDY JURISDICTIONS.................................................................................................................................27
List of appendices

Appendix 1: City of Vancouver Policy Report to Vancouver City Council (May 10, 2005)
Appendix 2: Sustainable Communities Index (SCI) – List of Elements, Objectives & Indicators
Appendix 3: SCI Healthy Development Checklist (Version 4.03)
Appendix 4: PHILATool (The Planning & Health Indicator List & Assessment Tool)
Appendix 5: Peel Healthy Development Index (HDI) – Initial Scoring Guide and Scorecard
Appendix 6: Sample chapter from Healthy Urban Development Checklist (Chapter 15: Social Cohesion & Social Connectivity)
<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEAT</td>
<td>Bicycling Environmental Audit Tool</td>
</tr>
<tr>
<td>CIP</td>
<td>Canadian Institute of Planners</td>
</tr>
<tr>
<td>CRICH</td>
<td>Centre for Research on Inner City Health</td>
</tr>
<tr>
<td>DTES</td>
<td>Downtown Eastside</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>ENCHIA</td>
<td>Eastern Neighborhoods Community Health Impact Assessment</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>HBS</td>
<td>Health Background Study</td>
</tr>
<tr>
<td>HCC</td>
<td>Healthy Communities Co-ordinator</td>
</tr>
<tr>
<td>HCS</td>
<td>Healthy City Strategy</td>
</tr>
<tr>
<td>HDI</td>
<td>Healthy Development Index</td>
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<tr>
<td>HDMT</td>
<td>Healthy Development Measurement Tool</td>
</tr>
<tr>
<td>HUDC</td>
<td>Health Urban Development Checklist</td>
</tr>
<tr>
<td>HIA</td>
<td>Health Impact Assessment</td>
</tr>
<tr>
<td>LAPP</td>
<td>Local Area Planning Process</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>PCPC</td>
<td>Philadelphia City Planning Commission</td>
</tr>
<tr>
<td>PDPH</td>
<td>Philadelphia Department of Public Health</td>
</tr>
<tr>
<td>PHES</td>
<td>Program on Health, Equity, and Sustainability</td>
</tr>
<tr>
<td>PHILATool</td>
<td>Planning and Health Indicator List &amp; Assessment Tool</td>
</tr>
<tr>
<td>SCI</td>
<td>Sustainable Communities Index</td>
</tr>
<tr>
<td>SF Planning</td>
<td>San Francisco Planning Department</td>
</tr>
<tr>
<td>SFDPH</td>
<td>San Francisco Department of Public Health</td>
</tr>
<tr>
<td>SSWAHS</td>
<td>Sydney South West Area Health Service</td>
</tr>
<tr>
<td>SIA</td>
<td>Social Impact Assessment</td>
</tr>
<tr>
<td>VCH</td>
<td>Vancouver Coastal Health</td>
</tr>
<tr>
<td>WAT</td>
<td>Walkability Assessment Tool</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
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</table>
Executive Summary

The connection between health and the built environment has attracted considerable attention in urban planning research and practice in recent years. Cities are increasingly looking to incorporate principles of health, well-being and quality of life into their planning processes. This study focuses on efforts by municipal and regional governments to bring broad health considerations into their planning and development processes through the use of comprehensive evaluation and decision-making tools. Research was conducted on the development and application of such tools and four jurisdictions were chosen for case studies: San Francisco, California; Philadelphia, Pennsylvania; Peel Region, Ontario; and New South Wales, Australia. The overarching objective of this study is to draw lessons from the case studies and provide a set of general recommendations for the City of Vancouver to consider in the potential creation of their own healthy planning and development toolkit. The idea to explore the development of such a toolkit stemmed from ongoing work in the City’s Social Policy Department on the Healthy City Strategy and the Downtown Eastside Social Impact Assessment.

This report first provides a background by outlining a broad notion of health and well-being, tracing the planning profession’s past and current relationship with health, discussing what a holistic health lens can offer to planning, and briefly introducing health impact assessment as a way to measure the health effects of planning and development. The context for healthy planning and development in Vancouver is provided through a discussion of relevant strategies, partnerships and processes. Four descriptive case studies are then presented, focusing on the development, structure, and implementation of the tools. An analysis and discussion of key themes and lessons from the case studies follows, along with an outline of existing strengths and opportunities that the City of Vancouver can build on in creating their own toolkit.

Based on the case studies and analysis in this report, the following recommendations (with accompanying rationales) are offered to the City of Vancouver as a general guide moving forward:

Central recommendation: The City should pursue the creation and implementation of a healthy planning and development toolkit.

1. Determine and clearly articulate the purpose, specific process, and intended users of the toolkit.
2. Engage the intended users and other stakeholders early in the process of creating the toolkit.

3. Ensure sufficient staff resourcing (i.e. a dedicated team) to support the development and implementation of the toolkit.

4. If a Downtown Eastside-specific tool stemming from the Social Impact Assessment (SIA) is created, use the process as a pilot study for a set of city-wide tools.

5. Leverage the opportunity to connect a healthy planning and development toolkit with the Healthy City Strategy.

6. The tools in the toolkit should support two primary objectives:
   a. Assess how well plans and/or development proposals address health objectives (i.e. a development checklist or review), and
   b. Track indicators of health at the neighbourhood level to set baselines and measure progress (i.e. a health and well-being indicator system).

7. Create a development review that can be tailored to different scales (e.g. a brief checklist for small developments and a longer qualitative review for large-scale developments and rezonings).

8. Use the three strategic directions and 20 building blocks of the Healthy City Strategy as the framework and guiding principles of a toolkit.

9. Draw from existing regulations, guidelines, targets and standards first.

10. The tools should facilitate consideration of groups that are most likely to be impacted by development decisions, and particular consideration should be given to marginalized or vulnerable groups.

11. A checklist component should go beyond considering the simple presence or absence of particular features to also consider issues such as accessibility and local relevance.

12. The toolkit should allow for the consideration of indirect and cumulative impacts.

13. Consider creating and supporting a publicly accessible toolkit component.
1. INTRODUCTION: PURPOSE, OBJECTIVES AND METHODS FOR THIS STUDY

This study focuses on efforts by municipal and regional governments to bring broad health and well-being considerations into their planning and development processes through the use of comprehensive evaluation and decision-making tools. Research was conducted on the development and application of such tools and four jurisdictions were chosen for case studies: San Francisco, California; Philadelphia, Pennsylvania; Peel Region, Ontario; and New South Wales, Australia. The overarching objective of this study is to draw lessons from the case studies and provide a set of general recommendations for the City of Vancouver to consider in the potential creation of their own healthy planning and development toolkit.

The idea to explore the development of such a toolkit stemmed from ongoing work in the City’s Social Policy Department. The City of Vancouver has long recognized that true sustainability requires integrated decision-making that takes into account the social, economic, and ecological needs of residents, neighbourhoods, and environments (Fig. 1). The City currently has two key plans for sustainability – the Greenest City 2020 Action Plan (ecological) and the Vancouver Economic Action Strategy (economic) – and are now in the process of developing the third – the Healthy City Strategy (social). A second process motivating this research is the Downtown Eastside (DTES) Social Impact Assessment (SIA) in the city’s most economically and socially marginalized neighbourhood. The DTES SIA was the first time the City was tasked to look at the impact of new development on the low-income population, and one outcome will be a set of potential questions to ask of developers seeking to build in the neighbourhood. The questions are intended to assess and manage the effects that a proposed development may have on resident-identified assets and gaps. While the framework developed through the SIA will be valuable for planning and development in the Downtown Eastside, it can also help inform the creation of a health-oriented tool that can be applied city-wide.

It is hoped that the information and analysis presented in this report will inform efforts to improve the health and well-being of Vancouverites and to work toward the vision of “A Healthy City for All” (City of Vancouver, 2013a).
Research Questions

The research questions that have guided this study are:

- What tools have been used in other cities to encourage and evaluate healthy urban planning and development, and how effective have these tools been in achieving their goals? What were the challenges faced in developing and implementing the tools? What were the key factors in their success?

- What lessons can be learned from these approaches to help guide the City of Vancouver in developing and implementing their own healthy urban planning and development tool or toolkit?

Methods

The information presented in this report was gathered primarily through review and analysis of articles, reports, planning documents and websites pertaining to healthy urban planning and development tools, and to healthy planning more generally. Representatives in each case study
jurisdiction were contacted to obtain up-to-date information on implementation, challenges faced, and future plans for their respective tools.

Limitations

There are countless ways that cities around the world have approached healthy planning and sought to improve the health and well-being of residents and communities. This study is not a review of these initiatives in a general sense; rather, it reviews and assesses health-focused development evaluation tools as they are applied in a specific city’s planning context.

This study is also limited by a focus on these tools as they are utilized in Western, primarily North American, jurisdictions. Cities in developing countries typically have a different planning context and very different health considerations than cities in developed, Western nations. There are, of course, lessons to be learned from approaches taken in the developing world, but the objectives of this particular study were best met by maintaining a focus on jurisdictions with planning and development contexts comparable to that of Vancouver.

2. BACKGROUND AND CONTEXT

“The overwhelming challenge we face in the 21st century—the dawn of the urban millennium—will be how to maintain and improve the health, wellbeing and quality of life of the earth’s increasingly urban population—and especially for its most disadvantaged members—while ensuring indefinite sustainability and ecosystem health. We must ensure that future generations have at least an equal opportunity to have as high a quality of life and to achieve their maximum potential as do we.” (Hancock, 1996, abstract).

Whether or not the relationship is always made explicit, the health and well-being of people, communities and environments is inextricably linked to municipal planning. This chapter first defines the broad notion of health and well-being that underpins this research and explores the role that local level planning and development decisions play in shaping it. Next, the chapter outlines how the relationship between health and planning has evolved and how it is typically approached at present. It then discusses the value that a holistic health lens offers for approaching 21st century challenges. The chapter ends with an introduction to health impact assessment, providing a background for the case studies presented in Chapter 4.
Definitions of health and well-being

Though increasing prevalence of chronic health conditions are a global concern, health at the individual, community and environmental levels is much more complex than simply being free of overt illness. In its fullest sense, ‘health’ implies the conditions necessary to thrive, rather than just survive. The World Health Organization (WHO) has defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948). While this definition is enduring and widely-cited, other interpretations abound. One holistic example is the definition adopted by the Aboriginal Health & Medical Research Council of New South Wales in Australia. Though it is given specifically in reference to Aboriginal health, its value can extend to all:

“**Aboriginal health** means not just the physical well-being of an individual but refers to the social, emotional and cultural well-being of the whole Community in which each individual is able to achieve their full potential as a human being, thereby bringing about the total well-being of their Community. It is a whole-of-life view and includes the cyclical concept of life-death-life” (Aboriginal Health & Medical Research Council of New South Wales, 2010, para.3).

The WHO’s 1986 Ottawa Charter for Health Promotion further illustrates health as “a resource for everyday life, not the objective of living” and “a positive concept emphasizing social and personal resources, as well as physical capacities (WHO, 1986, Health Promotion, para.1). The Canadian Institute of Planners (CIP) has highlighted that health “is as much about a process as it is a status, about becoming as much as being” (CIP, 2012, p.5).

Of course, the health of environments—social, economic, built and natural—must also not be separated from individual and community health and well-being. Healthy environments are those that are health-supporting and that create the spaces and systems which enable individuals to both meet their basic needs and to reach their potential. When understood in this way, it becomes clear that health is not just the purview of the healthcare sector, but rather that it is shaped by many different actors in our society.
Research on the social determinants of health, in both urban and rural contexts, is a growing field, the detailed analysis of which is beyond the scope of this study. Overall, the research in this field has shown that health and well-being are shaped not only by individual elements such as biological factors, lifestyle choices and access to medical treatment, but also by socioeconomic status and living conditions. These factors are referred to as the social determinants of health, and research increasingly suggests that they play a central role in well-being (WHO, 2003; Mikkonen & Raphael, 2010). Barton and Grant’s (2006) health map illustrates the determinants as a nested set of systems that ultimately interact to shape human health and well-being (Fig. 2). Mikkonen and Raphael (2010) offer an alternative perspective, identifying the following 14 key social determinants of the health of Canadians:

1. Income and income distribution
2. Education
3. Unemployment and job security
4. Employment and working conditions
5. Early childhood development
6. Food insecurity
7. Housing
8. Social exclusion
9. Social safety net
10. Health services
11. Aboriginal status
12. Gender
13. Race
14. Disability

In material terms, these determinants can shape an individual’s life circumstances such that they face difficulty accessing the basic prerequisites of health, such as food, housing or physical activity. The larger influence of these factors, however, stems from the chronic physiological and psychological stress that individuals experience as a result of their living conditions (Mikkonen & Raphael, 2010, p.10).
Figure 2: The determinants of health and well-being in our neighbourhoods (Source: Barton & Grant, 2006).

The broad and interconnected nature of these factors highlights the need to address health and well-being at the social and community level. Moreover, the determinants reveal inequities as they affect people along a clear gradient: people lower on the socio-economic ladder experience poorer health outcomes and earlier death than those higher up—and this is true at all points on the ladder (WHO, 2003, p.10). A city’s built environment plays a significant role in shaping the health and well-being of its citizens, as development decisions can constrain or facilitate health-supporting activities and can have unequal impacts on people in different socio-economic positions. Those who
struggle to meet their basic needs on a daily basis have the potential to be more strongly affected by physical and social change in their neighbourhoods than those who are in a more stable and privileged position.

Local policy and planning decisions are only one level among many that influence the social determinants of health and the social gradient on which they function. In Canada, federal and provincial policies have a larger impact on particular determinants, such as access to education, the social safety net, the provision of health services and the general economic climate, while the decisions and actions of business owners, developers, non-profits, and citizens also play a role at the community level. All of these levels operate and interact within a macro-level milieu that shapes, and is shaped by, our societal values and priorities. Northridge, Sclar and Biswas (2003) have outlined planning’s sphere of influence in the social determinants of health as the following: fundamental, macro-level factors (the natural environment, macro-social conditions and inequalities) interact with intermediate factors (the built environment and community level social context) and proximate, micro-level factors (stressors, health behaviors, and social integration and support) to shape the health and well-being of individuals and populations. They posit that planners primarily have the capability to influence the intermediate factors, especially those pertaining to the built environment (Northridge et al., 2003, p.560).

**Evolving ideas of public health and planning**

The modern professions of public health and city planning emerged to address many of the same concerns around the effects of rapid urbanization and industrialization in mid- to late-19th century cities, including unsanitary environments, outbreaks of infectious disease, overcrowded housing, and social disorder (Corburn, 2009). Initiatives such as housing reform and new public infrastructure for waste management and the provision of clean drinking water addressed the key concerns of this era. Zoning later emerged as a key planning tool in the early 20th century primarily as a way to separate residential and industrial uses, thereby protecting both human health and the interests of private landowners (Corburn, 2009, p. 44).

Despite the common origins and continuing common interests of the two fields, public health and urban planning have become increasingly separated, and Corburn (2009) points to the establishment of many new municipal departments and agencies in the post-WWI period as a
turning point. These new agencies promoted professional specialization and resulted in further “silo”-ing and separation between the fields (Corburn, 2009, p.39). Many of the health challenges we face in our cities today were fostered in part by the dominant planning paradigms and development patterns of the 20th century. Though single use zoning was originally viewed as promoting a healthy built environment, it has contributed to the auto-oriented development and suburban sprawl that now makes it difficult for many individuals to lead healthy, active lifestyles. Urban renewal projects in poor, inner-city neighbourhoods in the 1950s and 60s caused displacement and fractured communities both physically and socially, the effects of which are still felt today.

Health in urban planning today

The concept of healthy communities has seen a resurgence of attention in both the academic and professional planning realms in recent years. Themes relating to health and well-being—such as walkability, complete communities, and sustainability—have become core aspects of 21st century planning practice, as exemplified in the popularity of concepts like Smart Growth. More recently, issues around local food systems and urban agriculture have emerged as a priority in many cities. Planners and public health professional are also beginning to reconnect: both the Canadian Institute of Planners (CIP) and the American Planning Association (APA) have established partnerships with public health agencies in recognition of complimentary objectives and the value of an interdisciplinary approach.¹ In academia, considerable research has linked land use, transportation and the built environment to health and well-being outcomes (See, for example, Frank & Engelke, 2001; Frumkin, 2002; Frumkin, Frank & Jackson, 2004; Saelens, Sallis & Frank, 2003; Srinivasan, O’Fallon & Dearry, 2003). Many have explicitly called for a re-linkage of planning and public health and argued for the incorporation of health impact assessment into planning processes (Northridge et al., 2003; Northridge & Sclar, 2003; Forsyth, Slotterback & Krizek, 2010a; Forsyth, Slotterback & Krizek, 2010b).

The World Health Organization’s Healthy Cities initiatives have played a significant role in raising the profile of healthy urban planning around the world. This global movement began in 1986

¹ See CIP’s “Healthy Communities” at: http://www.cip.icu.ca/web/la/en/pa/c0aba8d17d1f149d9bb1ea1bd22d2203e4/template.asp and APA’s “Healthy Communities through Collaboration” at: http://www.planning.org/research/healthy/.
to “[engage] local governments in health development through a process of political commitment, institutional change, capacity-building, partnership-based planning and innovative projects” (WHO, 2013a, para.1.). Cities join national, regional, metropolitan and thematic Healthy Cities networks and start by creating a health profile and a health development plan. Each five year phase of the project focuses on an overarching goal and a set of priority themes (WHO, 2013b). In the view of the WHO, “the term healthy urban planning refers to the idea that a city is more than its buildings, streets and open spaces. Instead it is a dynamic social entity whose health is closely linked to those who reside in it” (WHO, 2011, p.2).

While most planners understand the importance of health in planning, many lack the capacity and tools necessary to incorporate it as part of their regular practice. In March 2011, the Canadian Institute of Planners (CIP) Healthy Communities Sub-committee conducted an online survey to determine how its members are addressing health and the built environment in their work and what information gaps exist. Eighty-nine percent of survey respondents expressed that they were aware of the impacts of the built environment on health in their respective communities, and respondents were able to identify broad health issues such as car-dependency, affordable housing and other social, economic and environmental concerns (Barr, 2011, p.7). Over 60% said they ‘always’ or ‘frequently’ consider health issues in their work (ibid., p.11) and, while many indicated they had used “tools” such as official plan revisions, policies designed to improve health, environmental impact assessment and subdivision to address community health impacts of the built environment over the previous two years, only 5% had utilized health impact assessment (ibid, p.13). Respondents also indicated a number of barriers to deepening the discussion of community health issues in their practice. The most commonly identified barriers included:

- Lack of government/political support,
- Competing issues that also demand attention,
- Little support among developers,
- Need for more tools,
- Results that are not measurable,
- Lack of knowledge,
- Lack of time,
- Issues with available research and policy directions about community health, and
• Lack of intersectoral collaboration

(Barr, 2011, p.17).

Following from that, respondents identified a number of factors that would assist them in better addressing health in their practice:

• Stronger, enforced policies;
• More research to guide practice and policy development;
• Frameworks or models to better explain how health, planning, and other aspects of community are inter-connected;
• More resources (time and/or funding); and
• Support for working with other sectors

(Barr, 2011, p.20).

Other research also suggests that while municipalities across North America are explicitly recognizing the linkages between health and the built environment in their planning documents, few have developed “mechanisms to directly influence health outcomes through the planning and development process” (The Planning Partnership, 2011a, p.14).

**Taking a holistic approach to planning through health**

Despite the increased attention to health-related themes in planning practice, and the growing research linking health and the built environment, there remains a considerable disconnect between land use planning and an integrated notion of health and well-being. The current emphasis on aspects such as walkability and access to healthy foods is promising, but a healthy community in its fullest sense encompasses much more. A more holistic approach is critical for meeting the intersecting challenges we face in the 21st century: climate change, increasing prevalence of chronic health conditions, and growing inequality (City of Vancouver, 2013a, p.5).
Viewing planning through a broad health and well-being lens has the potential to address these challenges and to integrate social, environmental and economic considerations in a powerful way. The three pillar approach to sustainability (environmental, economic, and social) is common in planning and other disciplines; however, our society too often elevates economic considerations above the other pillars, instead of viewing sustainable economic activity as a means to an end goal of healthy human development (Hancock, 1996). True sustainability requires all pillars to be balanced and mutually supportive. Hancock (1993) offers the following conceptual model (Fig. 3) for linking these social, environmental and economic dimensions in the context of human well-being:

![Diagram of health and community ecosystem](image)

**Figure 3: Model of health and the community ecosystem (Hancock, 1993).**

Hancock (1996) defines a healthy community as one that strives to achieve the qualities depicted in the model and, in doing so, aims to balance the competing values without exploiting the community’s own members, other communities, or the ecosystem. The CIP has also identified the process inherent in the concept of health, describing a healthy community as “a complex adaptive system, constantly changing, flexing and evolving” (CIP, 2012, p.5).
Our 21st century challenges cannot be met by individual sectors working in isolation; rather, we need to recognize interconnectivities and work collaboratively to achieve the best possible outcomes (Hancock, 1996). In practice, a health and wellbeing-oriented approach to planning encourages planners and others to overcome ‘silo-ed’ thinking and to build partnerships across disciplines and between organizations. As the CIP has noted “[p]rogress is made when disciplinary ‘silos’ become more flexible—even fluid—allowing specialized knowledge to be shared between municipal departments, government jurisdictions, and stakeholders” (CIP, 2012, p.5).

**Measuring health impacts of planning and development**

Measuring the impacts of planning and development decisions is a crucial part of building healthier communities. Health impact assessment (HIA) has gained traction in many sectors and is increasingly been viewed as a valuable tool for the urban planning process. The WHO notes that HIA has two primary purposes: “to predict the likely health effects of a proposal on a specific population group or groups and to inform policy-makers to improve evidence-based recommendations in the decision-making process” (WHO, 2005, p.4). Because direct analysis of the outcomes that are attributable to a particular proposal is not typically feasible, HIA must approach health and well-being outcomes by first analyzing how a proposal is likely to impact the determinants of health and then analyzing how the determinants of health affect outcomes (WHO, 2005, p.4). There is no single way to conduct an HIA, but the general stages include screening, scoping, appraisal, reporting, and monitoring (Fig. 4).
While HIA is not commonly used in relation to urban planning and development at this point, it is attracting growing interest. On the academic side, Forsyth et al. (2010a; 2010b) have developed a planning-oriented, evidence-based suite of HIA tools consisting of a preliminary screening checklist, a process for a participatory rapid assessment workshop, and an intensive, evidence-based threshold analysis. Several cities have conducted one-time HIAs of major projects, such as the BeltLine redevelopment in Atlanta, and the King’s Cross Central development in London, UK.\(^2\)

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3. CONTEXT FOR HEALTHY PLANNING & DEVELOPMENT IN VANCOUVER

This chapter summarizes the City of Vancouver’s policy and planning context by first outlining the City’s definitions of sustainability and discussing the Healthy City Strategy and the existing environmental and economic strategies it is intended to complement. It then discusses the City’s developing partnership and Memorandum of Understanding with Vancouver Coastal Health and outlines the Downtown Eastside Social Impact Assessment (SIA), which gave rise to the discussion of a potential city-wide assessment tool for healthy planning and development. The chapter ends with a brief outline of how broad health issues are currently addressed within the City’s development process.

Sustainability

Vancouver City Council adopted the following definition of sustainability in 2002 to guide the City’s sustainability objectives:

A sustainable Vancouver is a community that meets the needs of the present without compromising the ability of future generations to meet their own needs.

It is a place where people live, work, and prosper in a vibrant community of communities.

In such a community, sustainability is achieved through community participation and the reconciliation of short and long-term economic, social, and ecological well-being.

Sustainability is a direction rather than a destination. A sustainable city is one that protects and enhances the immediate and long-term well-being of a city and its citizens, while providing the highest quality of life possible. Sustainability requires integrated decision-making that takes into account economic, ecological, and social impacts as a whole.

(City of Vancouver, 2002)

Social Sustainability

Vancouver City Council adopted the following definition of social sustainability in 2005 to guide the City’s actions and operations toward the social component of the City’s sustainability objectives (see Appendix 1 for the accompanying components and guiding principles):

For a community to function and be sustainable, the basic needs of its residents must be met. A socially sustainable community must have the ability to maintain and build on its own resources and have the resiliency to prevent and/or address problems in the future.
There are two types or levels of resources in the community that are available to build social sustainability (and, indeed, economic and environmental sustainability) - individual or human capacity, and social or community capacity.

Individual or human capacity refers to the attributes and resources that individuals can contribute to their own well-being and to the well-being of the community as a whole. Such resources include education, skills, health, values and leadership.

Social or community capacity is defined as the relationships, networks and norms that facilitate collective action taken to improve upon quality of life and to ensure that such improvements are sustainable.

To be effective and sustainable, both these individual and community resources need to be developed and used within the context of four guiding principles - equity, social inclusion and interaction, security, and adaptability.

(City of Vancouver, 2005)

**Healthy City Strategy**

“A Healthy City for All: Vancouver’s Healthy City Strategy” is intended to become the social pillar in a set of sustainability plans that includes the Greenest City 2020 Action Plan and the Vancouver Economic Action Strategy. As of the writing of this report, the strategy is in development and has not yet been adopted as official policy by Vancouver City Council. The draft strategy identifies a framework consisting of twenty building blocks of a healthy city organized in three key strategy areas (Fig.5):

- Towards Healthy People: taking care of basics
- Towards Healthy Communities: cultivating connections
- Towards Healthy Environments: ensuring liveability now and into the future

The strategy also contains 12 long-term goals with mid-term targets for 2023, a range of key strategies that make use of the City’s full range of tools, and a set of highest priority actions for 2013-2016. It is recognized that achieving a healthy city for all will require significant multi-sectoral collaboration and community engagement.
Figure 5: Building Blocks of a Healthy City for All – City of Vancouver's draft Healthy City Strategy (Source: City of Vancouver, 2013a)
**Greenest City 2020**

Vancouver’s Greenest City 2020 Action Plan has been a core priority for the City in recent years. The plan “sets the course toward realizing a healthy, prosperous, and resilient future” (City of Vancouver, 2012a, p.5) through three strategic directions and ten long-term goals:

**One: Green Economy, Green Jobs**
1. Gain international recognition as a mecca of green enterprise
2. Eliminate dependence on fossil fuels
3. Lead the world in green building design and construction

**Two: Greener Communities**
4. Make walking, cycling, and public transit preferred transportation options
5. Create zero waste
6. Provide incomparable access to green spaces, including the world’s most spectacular urban forest
7. Achieve a one-planet ecological footprint

**Three: Human Health**
8. Enjoy the best drinking water of any major city in the world
9. Breathe the cleanest air of any major city in the world
10. Become a global leader in urban food systems

The Action Plan lays out targets for 2020, baseline numbers, priority actions, and key strategies for each goal.

**Economic Action Strategy**

The City of Vancouver’s Economic Action Strategy lays out a vision of “[a] high-performing economy that successfully lever the City’s global profile and its momentum as a centre of innovation and entrepreneurship” (City of Vancouver 2011a, p.3) through three areas of focus:

1. Create a Healthy Climate for Growth and Prosperity;
2. Provide Support for Local Business, New Investment and Global Trade;
3. Focus on People – Attracting and Retaining Human Capital.
Partnership with Vancouver Coastal Health

Vancouver Coastal Health (VCH), which provides health services to Vancouver and surrounding coastal communities, has a long history of working with City of Vancouver planners. More recently, VCH’s contributions have expanded beyond discussions of health-related facilities and programs to encompass a broader range of issues such as disease prevention and healthy built environments. In July 2011, Vancouver City Council endorsed a new approach to community planning which incorporated, among many other issues, a focus on urban health (City of Vancouver, 2011b). VCH was one of several stakeholders involved in the creation of Terms of Reference for the three plans, which were approved by Council in March 2012 (City of Vancouver, 2012b). As a result, VCH has been involved in the four community planning processes currently underway in Vancouver—the Downtown Eastside, Grandview-Woodland, Marpole and the West End—through community workshops and targeted focus groups. While VCH is currently making significant contributions to city policy in this way, they do not provide any systematic health-based review of development proposals.

In late 2012, the City of Vancouver and VCH collaboratively developed a Memorandum of Understanding entitled “A Healthy Vancouver for All: a Healthy City Partnership MOU between the City of Vancouver and Vancouver Coastal Health” to facilitate the on-going effort of both partners to improving the health, well-being and quality of life for all residents of Vancouver. The draft MOU outlines a number of principles to guide the partnership, one of which is to take a balanced approach by “pursu[ing] collaborative initiatives that are both universal for all citizens and targeted at specific populations who may be most vulnerable to health inequities” (City of Vancouver & VCH, 2012, p.4). Seven focus areas from the Healthy City Strategy have been identified as priority focus areas for enhanced collaboration over the first 4-year term of the MOU:

1. Healthy housing options
2. Food security and sustainable food systems
3. Early care and learning
4. Active living and getting outside
5. Healthy services
6. Social connectedness
7. Healthy built environment

A Healthy City Steering Committee comprised of staff from the City and VCH will be tasked with creating detailed work plans with targets, outcomes and indicators for each of the 7 areas (City of Vancouver & VCH, 2012, p.6). The collaborative exploration, development, implementation, and evaluation of components of a healthy urban planning and development toolbox is a priority action under the Healthy Built Environment focus area of the draft MOU (City of Vancouver & VCH, 2012, p.14).

**Downtown Eastside Social Impact Assessment**

Vancouver’s Downtown Eastside (DTES) is a historically low-income area facing numerous social challenges. It is home to a high proportion of people struggling with addictions, mental illnesses and other chronic health conditions, and homelessness. Many of its residents also have a strong sense of loyalty to the neighbourhood and there is a strong tradition of community activism. Gentrification pressures have increased in recent years and the neighbourhood has seen an inflow of condos, boutique shops and high-end restaurants, which has led to increased fear of exclusion and displacement among many residents. Vancouver City Council passed a motion in January, 2010: “THAT a social impact study be conducted to assess the effect on the existing low-income community of new developments in the historic area and where opportunities for enhanced affordability and liveability may be achieved.” (City of Vancouver, 2010a, p.3)

Social impact assessment (SIA) is a process for “analyzing, monitoring and managing both the intended and unintended social consequences” of development on the surrounding community, with the ultimate goal of maximizing positive impacts and minimizing negative ones (Vanclay, 2003, p.6). Social impacts can include changes to people’s way of life, culture, political systems, environment, health and well-being, personal and property rights, and fears and aspirations (Vanclay, 2003, p.6). The DTES SIA differed from typical SIA processes in that it was not focused around the impacts of a specific development or policy proposal, but rather around the impacts of new development in the neighbourhood in a general sense. It was also conducted in parallel to, but as a separate process from, the DTES Local Area Planning Process (LAPP). Three main objectives underpin the assessment:
1. Maintain places and spaces important to the health and well-being of vulnerable residents in the DTES;
2. Focus future planning efforts where gaps exist;
3. Monitor and measure progress and impacts of development (City of Vancouver, 2013b)

Reflecting a trend in recent SIA work, the DTES SIA was a highly participatory process. Following an initial review and analysis of data sources and the development of baseline knowledge of the community, nearly 600 low-income DTES residents, ranging from children to seniors and elders, took part in the community input phase (City of Vancouver, 2013b). This phase consisted primarily of small workshops and focus groups in which participants were invited to map and discuss what they viewed as the assets and gaps in the neighbourhood as well as the hopes and fears they have for change and development. City staff then examined the likely effects of continued development on the resident-identified assets and gaps. One outcome emerging from the SIA is a set of questions to ask of developers seeking to build in the neighbourhood, and staff are currently exploring options for using these questions as the basis for a DTES-specific development management or evaluation tool. It is from this process that the idea of a city-wide evaluation tool emerged; however, a broader health framework, rather than one that emphasizes only social impacts, was seen as a more appropriate approach for this context.

**Health Considerations in the Development Application Process**

While many of the City’s existing zoning by-laws, policies and design guidelines address certain aspects of healthy development, there is currently no mechanism in place in the development application process to systematically consider impacts on the health of people and communities, and to ensure that a broad health and well-being lens is applied. Though it may not be explicitly cited, provisions are made for certain aspects of healthy development in the following ways:

- The City provides detailed design guidelines for particular uses including urban agriculture, childcare facilities, public plazas, and high-density housing for families with children.
- Rezonings to Comprehensive Development District (CD-1) allow for the creation of custom, site-specific zones for which Council may establish particular conditions.
• Development Cost Levies (DCLs) and Community Amenity Contributions (CACs) are collected to help fund City facilities, many of which contribute to healthy and liveable communities. These facilities include parks and libraries; childcare facilities; cultural facilities; community centres, rinks, and pools; non-profit and social housing; bikeways and greenways; streets and transportation infrastructure; and police stations and fire halls (City of Vancouver, 2012c).

• As part of the EcoCity Policies for Rezoning Sustainable Large Sites, rezonings involving sites two acres or larger require the applicant to provide plans or studies on district energy screening and feasibility, sustainable site design, green mobility and clean vehicles, rainwater management, solid waste diversion, and sustainable housing affordability and housing mix (City of Vancouver, 2010b).

4. HEALTHY URBAN PLANNING AND DEVELOPMENT TOOLS: FOUR CASES

Full-scale health impact assessments can be time-consuming and costly and may not be feasible for a municipal planning department to conduct on a regular basis, even if the bulk of the assessment is contracted to an outside consultant. Scaled-down tools designed to assess a plan or development proposal against a set of identified targets, questions or indicators offer a way to systematically consider health issues and promote healthier development without requiring the resources of a full HIA. This chapter profiles initiatives in San Francisco, California; Philadelphia, Pennsylvania; Peel Region, Ontario; and New South Wales, Australia, to develop and implement standardized assessment tools for healthy planning and development. These jurisdictions were chosen as case studies because their tools are (or were intended to be) in active use and all were part of a larger thrust toward strengthening the link between planning and health in their respective organizations. Each of the case study tools has also been cited by other researchers and practitioners, and materials such as case studies, supplemental reports and conference presentations for each were widely available and accessible. There is substantial variation in structure and function between the case study tools, and each presents different lessons for consideration in the City of Vancouver. Table 1 provides an introduction to the case study jurisdictions and examines the comparability of their policy frameworks and socio-demographic profiles to that of Vancouver.
Table 1: Policy Framework and Socio-Demographic Profiles of Vancouver and Case Study Jurisdictions

<table>
<thead>
<tr>
<th></th>
<th>Vancouver</th>
<th>San Francisco</th>
<th>Philadelphia</th>
<th>Region of Peel</th>
<th>New South Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of government</strong></td>
<td>City</td>
<td>Consolidated city-county</td>
<td>Consolidated city-county</td>
<td>Regional municipality consisting of three lower-tier municipalities (City of Mississauga, City of Brampton, Town of Caledon)</td>
<td>State, with 152 local government areas</td>
</tr>
<tr>
<td><strong>Health authority/agency</strong></td>
<td>Vancouver Coastal Health (regional level, serving Vancouver and other coastal communities)</td>
<td>San Francisco Department of Public Health (city-county level)</td>
<td>Philadelphia Department of Public Health (city-county level)</td>
<td>Peel Public Health (regional level)</td>
<td>New South Wales Ministry of Health (state level, with 15 Local Health Districts)</td>
</tr>
<tr>
<td><strong>Program and policy framework connecting health and well-being to urban planning</strong></td>
<td>Formalized partnership and MOU between Vancouver Coastal Health and the City of Vancouver under development Healthy City Strategy, currently under development in Social Policy department</td>
<td>SFDPH Program on Health, Equity and Sustainability “works in partnership with residents, public agencies and private organizations to advance healthy environments and social justice.” (SFDPH, 2013) San Francisco Community Health Improvement Plan, San Francisco Department of Public Health (December 2012)</td>
<td>Get Healthy Philly initiative is a collaborative effort focusing on active living and healthy environments Explicit health and well-being objectives and health-supportive policy in citywide plan, Philadelphia2035 (2011)</td>
<td>Regular involvement and collaboration by Peel Public Health with planning and other departments across the region on issues relating to healthy built environments Strategic action in Region of Peel Strategic Plan, 2011-2014</td>
<td>NSW Health is regularly involved in planning and development processes through Local Health Districts Differs by Local Health District and Local Government Area</td>
</tr>
</tbody>
</table>
Table 1: Policy Framework and Socio-Demographic Profiles of Vancouver and Case Study Jurisdictions

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<tr>
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<th>San Francisco</th>
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<th>Region of Peel</th>
<th>New South Wales</th>
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<tbody>
<tr>
<td></td>
<td>Persons 19 and under, 2006: 17.9%</td>
<td>Persons under 18 years, 2011: 13.5%</td>
<td>Persons 19 and under, 2011: 22.5%</td>
<td>Mississauga: 713,540</td>
<td>Greater Sydney: 4.61 million</td>
</tr>
<tr>
<td></td>
<td>Persons 65 and over, 2006: 13.1%¹</td>
<td>Persons 65 years and over, 2011: 13.8%²</td>
<td>Persons 65 years and over, 2011: 12.1%³</td>
<td>Brampton: 523,910</td>
<td>Persons 19 and under, 2011: 25.6%</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Caledon: 59,460⁵</td>
<td>Persons 65 and over, 2011: 14.7%⁷</td>
</tr>
<tr>
<td><strong>Visible minority population</strong></td>
<td>Total visible minority population, 2006: 51.0%</td>
<td>White persons, 2011: 54.5%</td>
<td>White persons, 2011: 45.9%</td>
<td>Total visible minority population, 2006: 49.97%</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>Chinese: 29.4%</td>
<td>Black persons, 2011: 6.3%</td>
<td>Black persons, 2011: 44.3%</td>
<td>South Asian: 23.63%</td>
<td>South Asian: 23.63%</td>
</tr>
<tr>
<td></td>
<td>South Asian: 5.7%</td>
<td>Asian persons, 2011: 33.9%</td>
<td>Asian persons, 2011: 6.6%</td>
<td>Black: 8.28%</td>
<td>Black: 8.28%</td>
</tr>
<tr>
<td></td>
<td>Filipino: 5.0%</td>
<td>Persons of Hispanic or Latino Origin, 2011: 15.4%</td>
<td>Persons of Hispanic or Latino Origin, 2011: 12.6%</td>
<td>Chinese: 4.70%</td>
<td>Chinese: 4.70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Filipino: 3.72%⁹</td>
<td>Filipino: 3.72%⁹</td>
</tr>
<tr>
<td><strong>Aboriginal population</strong></td>
<td>Total Aboriginal identity population, 2006: 1.9%</td>
<td>American Indian and Alaska Native persons, 2011: 0.9%</td>
<td>American Indian and Alaska Native persons, 2011: 0.8%</td>
<td>Total Aboriginal identity population, 2006: 0.48%¹⁰</td>
<td>Aboriginal and Torres Strait Islander people, 2011: 2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Native Hawaiian and Other Pacific Islander persons, 2011: 0.5%</td>
<td>Native Hawaiian and Other Pacific Islander persons, 2011: 0.1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Policy Framework and Socio-Demographic Profiles of Vancouver and Case Study Jurisdictions

<table>
<thead>
<tr>
<th></th>
<th>Vancouver</th>
<th>San Francisco</th>
<th>Philadelphia</th>
<th>Region of Peel</th>
<th>New South Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immigrant population</strong></td>
<td>Immigrants, 2006: 45.6%</td>
<td>Foreign born persons, 2007-2011: 35.6%</td>
<td>Foreign born persons, 2007-2011: 11.6%</td>
<td>Immigrants, 2006: 48.6%&lt;sup&gt;11&lt;/sup&gt;</td>
<td>Person born in countries other than Australia, 2011: 31.4%</td>
</tr>
<tr>
<td><strong>Housing type</strong></td>
<td>Type other than single detached house, 2006: 80.6%</td>
<td>Housing units in multi-unit structures, 2007-2011: 67.3%</td>
<td>Housing units in multi-unit structures, 2007-2011: 32.8%</td>
<td>Type other than single detached house, 2006: 53.0%&lt;sup&gt;12&lt;/sup&gt;</td>
<td>Dwelling structure other than separate house, 2011: 30.4%</td>
</tr>
<tr>
<td><strong>Educational attainment</strong></td>
<td>High school certificate or equivalent, or higher, age 25-64, 2006: 89.8%</td>
<td>High school graduate or higher, age 25+, 2007-2011: 85.7%</td>
<td>High school graduate or higher, age 25+, 2007-2011: 80.0%</td>
<td>High school certificate or equivalent, or higher, age 25-64, 2006: 87.7%</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>University certificate, diploma or degree, age 25-64, 2006: 46.5%</td>
<td>Bachelor’s degree or higher, age 25+, 2007-2011: 51.4%</td>
<td>Bachelor’s degree or higher, age 25+, 2007-2011: 22.6%</td>
<td>University certificate, diploma or degree, age 25-64, 2006: 35.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High school certificate or equivalent, or higher, age 65+, 2006: 61.3%</td>
<td>High school graduate or higher, age 25+, 2007-2011: 80.0%</td>
<td>High school graduate or higher, age 25+, 2007-2011: 80.0%</td>
<td>High school certificate or equivalent, or higher, age 25-64, 2006: 87.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University certificate, diploma or degree, age 65+, 2006: 21.9%</td>
<td>Bachelor’s degree or higher, age 25+, 2007-2011: 22.6%</td>
<td>Bachelor’s degree or higher, age 25+, 2007-2011: 22.6%</td>
<td>University certificate, diploma or degree, age 65+, 2006: 59.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployment rate, age 15+, 2006: 6.0%</td>
<td>Population age 16+ unemployed, 2007-2011: 5.2%&lt;sup&gt;14&lt;/sup&gt;</td>
<td>Population 16+, unemployed, 2007-2011: 8.0%&lt;sup&gt;15&lt;/sup&gt;</td>
<td>Unemployment rate, age 15+, 2006: 6.4%&lt;sup&gt;16&lt;/sup&gt;</td>
<td>People who reported being in the labour force, age 15+, unemployed, 2006: 5.9%</td>
</tr>
</tbody>
</table>
Table 1: Policy Framework and Socio-Demographic Profiles of Vancouver and Case Study Jurisdictions

<table>
<thead>
<tr>
<th>Key health &amp; planning issues</th>
<th>Vancouver</th>
<th>San Francisco</th>
<th>Philadelphia</th>
<th>Region of Peel</th>
<th>New South Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentrification, redevelopment, and housing affordability</td>
<td>Gentrification, redevelopment, and housing affordability</td>
<td>Obesity and obesity-related illnesses</td>
<td>Neighbourhood walkability and access to healthy food</td>
<td>Auto-oriented development</td>
<td>Significant population growth and new development</td>
</tr>
<tr>
<td>Socio-economic inequalities</td>
<td>Health equity</td>
<td></td>
<td></td>
<td>Walkability and physical activity</td>
<td>Health equity</td>
</tr>
<tr>
<td></td>
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Data Sources

Case Study: San Francisco Sustainable Communities Index

Like Vancouver, three prominent issues on the planning agenda in San Francisco are “the accommodation of new residential uses, housing affordability, and protection of industrial uses” (San Francisco Department of Public Health, 2008 p.14). Community groups have been vocal in expressing concern about development in the city, and the San Francisco Department of Health (SFDPH) has responded by engaging in projects to assess health impacts. The SFDPH is responsible for providing health services, programs and information across the consolidated city-county of San Francisco (See Fig. 6). The Program on Health, Equity & Sustainability (PHES) “is an inter-disciplinary team at [SFDPH] that works in partnership with residents, public agencies and private organizations to advance healthy environments and social justice” (SFDPH, 2013). A significant portion of the PHES’s work has involved HIA and applications of the Sustainable Communities Index (SCI), a comprehensive planning and development evaluation tool. This case study outlines the development and ongoing evolution of the SCI.

Figure 6: San Francisco, Eastern Neighborhoods (Source: Kurykh, 2012, modified by author).
**Development**

San Francisco’s Sustainable Communities Index (SCI)—originally titled the Healthy Development Measurement Tool (HDMT)—was developed in 2007 out of the Eastern Neighborhoods Community Health Impact Assessment (ENCHIA) process. At the time that the Eastern Neighborhoods Community Planning process was launched in 2002, this area of the city—which encompasses the Mission, South of Market, Showplace Square/Potrero Hill, and Bayview-Hunters Point neighbourhoods—was experiencing significant development pressures, and thus a major focus of the planning process was the rezoning of historically industrial lands to allow new residential development (Farhang et al., 2008) (Fig. 6). Community stakeholders pressured the San Francisco Planning Department (SF Planning) for an analysis of the social, health, and economic impacts of the proposed plan and approached SFDPH to conduct a formal Health Impact Assessment (HIA) (Farhang et al., 2008). In response, SFDPH launched the ENCHIA process in November 2004 to be conducted in parallel to the community planning process. SFDPH had already been engaged with wider health equity issues and the socio-economic forces that shape them since the late 1990s, addressing issues such as food justice in low-income neighbourhoods and the health impacts of a proposed living wage ordinance (Corburn, 2009).

Throughout the ENCHIA process, SFDPH worked in partnership with a multi-stakeholder Community Council representing a broad range of interests including “community planning and design, economic and neighborhood development, environmental justice, homelessness, open space, housing, sustainable transportation, food systems, child care and childhood development advocates, small businesses, and low-wage and union workers” (Farhang et al, 2008, p.257). Initially, SF Planning had intended to co-lead the process with SFDPH, but they opted instead to take a more arms-length, advisory role (SFDPH 2007, p.69).

The ENCHIA was originally intended to specifically evaluate and inform the Eastern Neighborhoods planning process and its associated environmental impact assessment (EIA). However, delays in the publication of the area plans led the ENCHIA Council to adapt by refocusing on the creation of a general evaluation tool, which became the HDMT (SFDPH, 2007). In addition to the work of the ENCHIA Council, eight City agencies and nearly two dozen technical reviewers in the

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3 ‘HDMT’ will be used to refer to the tool prior to its name change in 2012.
fields of land use and transportation planning, public health, HIA, EIA, and health equity provided comments and suggestions for improvements to the HDMT (SFDPH, 2007, p.59).

Structure

The SCI is described as “a tool to track progress towards a livable, equitable and prosperous city” (Sustainable Cities Collective, 2012a). In its current form, it consists of three primary components presented in an online interface that can be employed to examine the City’s current conditions and to evaluate plans and development projects.  

Indicator System

The current version of the SCI contains over 100 indicators designed to measure progress toward twenty-six community health and sustainability objectives (see Appendix 2). The objectives are in turn organized under seven elements: Environment, Transportation, Community, Public Realm, Education, Housing and Economy. Additional indicators provide general demographic and health outcome information. Indicator data can be used to determine baseline conditions in neighbourhoods and across the city and to monitor changes in these conditions (Fig. 7).  

Data for each indicator is presented in both map and table format, where possible, to facilitate comparison between different areas of the city. Each indicator also includes an explanation of its connection to health and sustainability, an interpretation and analysis of geographic equity between neighbourhoods, and information on data collection methods, limitations and sources.

Healthy Development Checklist

The Healthy Development Checklist contains development criteria and targets that can be used to evaluate whether a plan or project helps to achieve the SCI’s community health objectives (see Appendix 3). The layout of the checklist is simple and allows the user to note whether each target is applicable to the project being evaluated, whether or not the plan or project achieves the target, and what information sources were used (Fig. 8). A User’s Guide accompanies the checklist and includes notes on applicable SCI indicators, relevant San Francisco development regulations (if they exist), and additional definitions and explanations where necessary for each target. The checklist is geared primarily towards the assessment of large-scale residential, commercial, or

---

4 See http://www.sustainablesf.org.
mixed-use development projects and, since many of the targets are not tied to City requirements and regulations, it functions as a set of voluntary guidelines for healthy development.

**Menu of Policies and Design Strategies**

The Policy and Design Strategy section provides a list of potential actions that project sponsors and policy makers can undertake to help achieve the SCI’s development targets and advance its community health objectives (Sustainable Communities Collective, 2012b). Strategies are organized by objective and can be used to develop recommendations for improving a plan or project.

<table>
<thead>
<tr>
<th>HOUSING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives &amp; Indicators</strong></td>
</tr>
<tr>
<td>H.1. Preserve and construct housing in proportion to demand with regards to size, affordability, and tenure</td>
</tr>
<tr>
<td>H.1.a. Housing production and affordability</td>
</tr>
<tr>
<td>H.1.b. Excessive rent burden</td>
</tr>
<tr>
<td>H.1.c. Housing purchasing capacity</td>
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<tr>
<td>H.1.d. Home ownership</td>
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<td>H.1.e. Overcrowding</td>
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<tr>
<td>H.1.f. Housing wage &amp; minimum wage</td>
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<tr>
<td>H.1.g. Residential density</td>
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<tr>
<td>H.2. Protect residents from involuntary displacement</td>
</tr>
<tr>
<td>H.2.a. Fair market rate rent trends</td>
</tr>
<tr>
<td>H.2.b. No-fault evictions</td>
</tr>
<tr>
<td>H.2.c. Affordable rental housing stock</td>
</tr>
<tr>
<td>H.3. Decrease concentrated poverty</td>
</tr>
<tr>
<td>H.3.a. Ethnic diversity</td>
</tr>
<tr>
<td>H.3.b. Low-income households</td>
</tr>
<tr>
<td>H.4. Assure access to healthy quality housing</td>
</tr>
<tr>
<td>H.4.a. Housing health &amp; safety violations</td>
</tr>
</tbody>
</table>

*Figure 7: San Francisco Sustainable Communities Index (SCI) – Housing Objectives and Indicators (Sustainable Communities Collective, 2012c).*
<table>
<thead>
<tr>
<th>#</th>
<th>Housing Criteria</th>
<th>Applicable Project Type (yes/no)</th>
<th>Target Achieved? (Yes/No/??)</th>
<th>Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.1.a</td>
<td>If the project is residential, does the project set aside 20% of units (onsite) for affordable housing to contribute to affordable housing need?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.1.b</td>
<td>If the project is residential, does the project distribute unit size with at least 25% of units being 2-bedrooms and with at least 25% of units being 3-bedrooms?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.1.c</td>
<td>If the project is residential, does the project provide rental housing? For community plans, does the plan include a mix of rental and ownership housing within 15% of the current distribution of rental and ownership housing (currently 65% rent and 35% own)? In other words, range between 50%-80% rental and 20%-50% owner?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.1.d</td>
<td>If the project is residential, is the project designed with a residential density at or above 25 dwelling units per residential acre (or at or above 40 dwelling units per residential acre for projects &lt; ½ mile from regional mass transit stops including rail, ferry, or bus service)?</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Figure 8: Objective H.1 under Housing Criteria in SCI Healthy Development Checklist (Sustainable Communities Collective, 2012d, p.14).

The set of SCI resources assists users in answering three main questions:

1. Based on community health indicators and other data, what are the existing conditions of a neighbourhood?
2. Does a plan or project improve existing conditions or advance the health needs of the neighbourhood, as reflected in [SCI] development targets or objectives?
3. What planning policies, implementing actions, or project design strategies can be recommended to advance community health objectives?

(SFDPH, 2008, p.3).

Implementation: Successes and Challenges

To date, SFDPH staff members have employed the SCI, often in partnership with community groups, to evaluate the health implications of a number of large scale plans and projects. The first full-scale pilot application of the HDMT in spring of 2007 was an evaluation of the Executive Park Subarea Plan, which proposed to build 2800 residential units on a site primarily used for offices in
the southeastern corner of the city. In partnership with the HOPE SF initiative, the SFDPH used all three components to conduct baseline conditions assessments, evaluate project designs, and provide recommendations for the redevelopment of several public housing sites across the city (Sustainable Communities Collective, 2012e). SFDPH has also applied the SCI to evaluate and provide recommendations on the Eastern Neighborhoods Area Plans—as the ENCHIA had originally set out to do—and the Western SoMa Community Plan. In addition to these applications, the San Francisco Community Health Improvement Plan, released in December 2012, draws heavily from SCI data in its objectives and indicators (SFDPH, 2012).

The SFDPH is currently concentrating on the indicator system component of the SCI with the aim of positioning it as a performance management tool for a wide range of purposes in San Francisco, such as providing background information for grant applications. Instead of focusing primarily on urban development, the system is being opened up to new indicators that may not necessarily be actionable by developers (Wall, 2013). Moreover, SFDPH is redesigning the SCI website to make it less San Francisco-centric and to support other communities in developing their own indicator systems using the SCI template (Wall, 2013).

Despite the focus on the indicator system, SFDPH is also continuing to refine the Healthy Development Checklist with the goal of creating a more marketable product for developers (Wall, 2013). Future iterations may include a website based checklist to replace the current PDF document and may seek to incorporate some form of recognition or certification. For example, by meeting checklist targets, applicants could also achieve LEED certification. By making the checklist more dynamic and rewarding, the SFDPH hopes that more developers will see it as a worthwhile endeavour (Wall, 2013). At this point, it is not expected that the Healthy Development Checklist will become a requirement for developers in San Francisco. One concern with embedding the Checklist as a requirement is that its targets may end up being weakened in an attempt to appease the development community (Wall, 2013).

5 Additional information regarding these case studies can be found on the SCI website at: http://stage.thehdmr.org/case_studies.php.
Discussion

San Francisco’s SCI is the result of an effective partnership between SFDPH and community groups concerned with health inequities and the health impacts of planning and development decisions in their neighbourhoods. The SCI is the only case study tool to have emerged organically from a community-based process, and it has continued to successfully facilitate stronger relationships between the SFDPH and community and activist groups. The data and analysis presented in the Indicator System in particular has further empowered communities to advocate for their own health and well-being. Since the end of the ENCHIA process from which the tool emerged, SFDPH has shown a strong commitment to shaping and re-shaping the SCI and is now eager to share their approach with other communities. Having a municipal public health department that engaged earlier than departments in other cities with the social determinants of health model and with non-health specific public policy and the community planning process was likely a major factor in the successful development of the SCI.

While the three components of the tool are mutually supportive, the biggest value of the SCI is in the versatility of its indicator system, which can be employed by multiple user groups for a variety of purposes. In terms of ability to make concrete impacts on the planning and development process, the Healthy Development Checklist is somewhat limited by its focus on measuring voluntary development targets rather than encouraging deeper engagement and thought around determinants of health and well-being. However, a voluntary checklist aimed at developers ultimately has both benefits and drawbacks. At this point, developers have little incentive to utilize the checklist, but SFDPH is considering ways to make it more appealing and rewarding for them. By taking this approach, the checklist can function partly as a tool for education and can maintain its high standards, rather than risk a ‘watering down’ to become more palatable as a requirement.

Overall, the SCI supports a holistic view of community health and well-being. All three components of the Index consider the broad spectrum of the determinants of health and well-being—from the natural environment to transportation to education and recreation. The content of the SCI has evolved considerably over time and, while a comprehensive notion of health remains a central priority, recent iterations of the tool have emphasized ‘sustainability’ to a greater extent. Health and sustainability are seen as inseparable—just as “[s]ustainable places provide the resources for health” (Sustainable Communities Collective, 2012a, Sustainability and health),
unhealthy people and communities are seen as inherently unsustainable (Wall, 2013). Equity is also viewed as fundamental part of the equation. The wealth of information and analysis that accompanies each indicator strongly addresses geographic equity throughout the city and often explicitly discusses social, economic and cultural factors and disparities.

**Case Study: Philadelphia Health Impact Assessment and Healthy Planning Toolbox**

The City of Philadelphia has taken a comprehensive approach to integrating health considerations into planning, zoning and development but, as this case study will reveal, the process that has occurred has not reflected the scope of the original vision. Components of Philadelphia’s approach to health include:

- Get Healthy Philly, a partnership between the Philadelphia Department of Public Health (PDPH), the Philadelphia City Planning Commission (PCPC) and numerous other stakeholder agencies and organizations;
- As part of Get Healthy Philly, a Healthy Communities Co-ordinator (HCC) reporting to both PDPH and PCPC;
- Targeted Health Impact Assessments (HIAs) conducted alongside each of 18 new District Plans to be completed after the Citywide Vision;
- and a Healthy Planning Toolbox containing three tools:
  - PHILATool (Planning & Health Indicator List & Assessment Tool);
  - BEAT (Bicycling Environmental Audit Tool);
  - and WAT (Walkability Assessment Tool).
Development

Like San Francisco, Philadelphia is a consolidated city-county with health services, programs and information provided by the Philadelphia Department of Public Health (PDPH) (Fig. 9). Stemming from concerns over growing levels of obesity and chronic disease, the PDPH launched Get Health Philly in March 2010 with an emphasis on promoting healthy eating, physical activity, and smoke-free living (City of Philadelphia, 2010a). A number of city agencies and non-governmental partners were brought together in the initiative, which received over $25 million in funding from the U.S. Department of Health and Human Services (City of Philadelphia, 2011a). As part of the initiative, and its concurrence with a major plan update in Philadelphia, the promotion of health and well-being has been considered in the city’s planning processes to a degree that it had not been before.
Philadelphia2035 is the city’s first comprehensive plan update in 50 years and it lays out “goals and objectives that transcend specific policy areas and contribute to a stronger economy, a healthier population, and a smaller environmental footprint” (City of Philadelphia, 2011b, p.54). The plan, adopted by the PCPC in June 2011, was seen as a “once-in-a-generation chance […] to plan healthier environments and encourage active living” (City of Philadelphia, 2010b, p.7) A companion report explains how health was addressed within the Citywide Plan and new Zoning Code and outlines an HIA process for District Plans. Health-supportive policies were identified in the Citywide Plan in the following realms: Neighborhood Centres, Transit-Oriented Development (TOD), Improved & Expanded Transit Services, Healthy Food Access, Open Space Access, and Active Transportation Infrastructure (City of Philadelphia, 2010b).

In Philadelphia, District Plans have three primary purposes: to produce land use plans and zoning map revisions, to identify priority focus areas, and to make recommendations regarding public facilities and infrastructure (City of Philadelphia, 2012a). The City’s original intent was to conduct an HIA alongside each District Plan as they were completed between 2011 and 2015. HIAs were intended to target priority concerns and to assess each Plan’s recommendations with the following objectives:

- offer health-based rationales for the prioritization of certain projects
- explain the health consequences implicit in zoning decisions
- raise awareness of the health impacts of land use and development choices
- encourage greater community participation in the planning process
- empower residents to advocate for health-supportive decision-making

(City of Philadelphia, 2010b, p.32).

Structure

Intended both to support the work of the HIAs and to be used independently (City of Philadelphia, 2010b, p.33), Philadelphia’s Healthy Planning Toolbox consists of 3 tools:

**PHILATool (Planning & Health Indicator List & Assessment Tool)**

PHILATool is modeled after San Francisco’s SCI indicator system and provides indicators intended to measure progress toward each of 20 identified health-supportive Citywide Plan objectives (see Appendix 4). Some of the indicators were analyzed to varying degrees throughout
the Philadelphia2035 planning process to determine baselines, with a particular focus on obesity and access to healthy food. The tool also lays out a health-based rationale for each objective and an agency data source for each indicator (Fig. 10). At the time of its development, it was envisioned that the tool would eventually have a public interface that would allow residents to map indicators to answer their own questions (City of Philadelphia, 2010b).

<table>
<thead>
<tr>
<th>Citywide Plan Objective</th>
<th>Indicators</th>
<th>Agencies (data source)</th>
<th>Health-based Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.4 Provide convenient access to healthy food for all residents by locating food production and distribution facilities in neighborhood and metropolitan centers.</td>
<td>13. Number of healthy food sources (supermarkets, farmers’ markets, healthy corner stores, produce vendors).</td>
<td>Philadelphia Dept. of Public Health (PDPH), The Food Trust (TFT)</td>
<td>The presence of a supermarket in a neighborhood predicts greater consumption of fruits and vegetables and a reduced prevalence of overweight and obesity. Facilities such as farmers’ markets and urban farms provide opportunities for social interaction and education experiences for children, while providing direct access to produce and other goods at affordable prices.</td>
</tr>
<tr>
<td>15. Proportion of population within 10 minute walk of healthy food sources.</td>
<td>PDPH, PCPC, Mayor’s Office of Sustainability (MOS)</td>
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<tr>
<td>16. Ratio of healthy food sources to fast food outlets.</td>
<td>PDPH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Square footage of land zoned to permit urban agriculture as of right.</td>
<td>PCPC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Proportion of fresh food vendors accepting Philly Food Bucks, SNAP, WIC.</td>
<td>PDPH</td>
<td></td>
<td></td>
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</table>

Figure 10: PHILATool – Healthy Food Access Objectives and Indicators (City of Philadelphia, 2011c).

Bicycling Environmental Audit Tool (BEAT)

The BEAT is a survey tool designed to evaluate the degree to which intersections and streets facilitate a safe and comfortable cycling environment. It is a quantitatively-oriented tool that measures the presence or absence of particular features, such as traffic signals and street trees.

Walkability Audit Tool (WAT)

The WAT functions in a similar fashion to the BEAT and measures indicators of a pedestrian friendly environment.
Implementation: Successes and Challenges

Despite the impressive and ambitious outlook when it was first conceived, the Healthy Planning Toolbox, and PHILATool in particular, has not been institutionalized as an organizing tool in the city’s planning processes. When the Healthy Communities Co-ordinator (HCC) was hired, a significant amount of work was already underway for Philadelphia 2035, and re-framing this work under a health banner proved to be a lofty goal. According to Clint Randall, Philadelphia’s HCC, the attachment of health to this type of high profile planning initiative was both a strength and a challenge (Randall, 2013). Having such a significant amount of reform under development provided a favourable context for emerging discussions on health, but it also meant that there were many compelling issues drawing political interest at the time. For example, in revamping the city’s Zoning Code, issues around density and mixed uses were seen as more “important” than health, perhaps because they reflected more traditional land use concerns. Though these issues also have strong public health implications, layering on an additional health-based evaluation was seen as unproductive (Randall, 2013). Further, staff with other primary focuses had a limited amount of time and resources to devote to health considerations (Randall, 2013).

HIAs are no longer proposed for all 18 District Plans, but will instead be implemented to support specific purposes in areas where they are seen as particularly necessary (Randall, 2013). Two District Plan HIAs have already been completed. In the Lower South District, the HIA focused on a proposed subway extension, bike path, and land use changes (City of Philadelphia, 2012b). The West Park district HIA employed the Walkability Assessment Tool (WAT) from the Healthy Planning Toolbox to evaluate the accessibility of community facilities, healthy food and open space (City of Philadelphia, 2012c). Neither HIA makes explicit reference to PHILATool or the Healthy Planning Toolbox as a whole. The fundamental goal now is to ensure that the content of each plan addresses health considerations, even in the absence of a full HIA or consistent application of the toolbox. As of early 2013, staff are not actively refining PHILATool and there are no plans for an interactive public version (Randall, 2013). Despite the lack of success institutionalizing PHILATool in the planning process, health and well-being remains an ongoing discussion in Philadelphia and some of the indicator data is being used for other projects, including an online game aimed at facilitating community involvement in district plans (Randall, 2013).
Discussion

While Philadelphia has not been able to successfully implement the toolkit as it was designed, the process illustrates possibilities for integrating health into a city-wide comprehensive plan and highlights the importance of addressing health at the very beginning. Philadelphia was the only case study jurisdiction to have a cross appointed staff member dedicated to integrating planning and public health. The HCC has achieved considerable success in applying a health lens to the *Philadelphia2035* process, but the scope of the original aspirations proved to be too much for one individual to manage. The HCC faced challenges integrating health into a process that was already underway, and in which other priorities had already been established.

Connecting an introduction of health considerations with a significant overhaul of citywide and district plans and zoning codes provided an excellent opportunity for alignment. Matching the indicators in PHILATool with the objectives of the emerging city-wide plan rather than creating new objectives for a stand-alone tool capitalized on this connection. It ensured that the tool was attached to objectives to which the City was committed, but it also meant that the tool ultimately missed some important components of health and well-being because they were not a focus in the citywide plan. While there are objectives pertaining to housing and the strengthening of neighbourhood centers, the rationale behind them is limited to their impacts on physical activity and obesity. Opportunities for increased social interaction are only briefly mentioned in relation to walkable neighbourhoods and the development of farmer’s markets and urban farms.

Overall, Philadelphia’s approach to health is centred primarily around access to healthy food and promotion of physical activity, which speaks to the city’s fundamental concern with obesity among its residents. Though health outcomes are placed on the same level as economic and environmental outcomes in *Philadelphia2035*, the interconnections between these elements are alluded to, but are not often explicitly drawn. The health considerations in the plan remain largely at the level of physical health, rather than integrating a broader understanding of health and well-being. Within this focus, health is also understood primarily at the individual level, without clear connections to the community or environmental levels.
Case Study: Region of Peel Healthy Development Index and Health Background Study Framework

The Region of Peel lies west of the City of Toronto and encompasses the three lower-tier municipalities of Mississauga, Brampton, and Caledon (Fig. 11). Health services are provided at the regional level through Peel Public Health, and planning services are provided at both the regional and municipal levels. Peel Public Health has led efforts in recent years to bring public health and planning together, and this case study explores the development of two related planning tools: the Healthy Development Index (HDI) and the Health Background Study (HBS) Framework.

Figure 11: Region of Peel and lower tier municipalities (Source: Mortadelo2005, 2010, modified by author).

Development

Healthy Development Index

The impetus for Peel’s focus on healthy built environments came from the region’s high rates of obesity and obesity-related illnesses and low rates of active transportation, as well as the recognition that the prevalent development pattern of auto-oriented sprawl is a potential factor in
these outcomes (Centre for Research on Inner City Health at St. Michael’s Hospital, 2009, p.6). In 2005, Peel Council directed Peel Public Health staff to make planning recommendations and to review and comment on development applications received by the Region (Bursey et al., 2011, p.4). Initial efforts consisting of largely qualitative comments failed to make a strong impact and staff recognized a need for an evidence-based review process that would facilitate transparency and consistency (Bursey et al., 2011). In 2009 Peel Public Health contracted research services from the Centre for Research on Inner City Health at St. Michael’s Hospital (CRICH) to create an evidence-based Index.

The preliminary elements and measures of the Healthy Development Index were developed using findings from an extensive literature and best practices review on the relationship between health and the built environment. A series of consultations were then held with Peel municipal and regional planners and local private sector planning firms to “[assess] the practicality and feasibility of the Index and its implementation” (CRICH, 2009, p.7). Two analyses followed: a gap analysis, which compared Index standards with existing Regional and municipal standards, and a GIS study of a small number of Peel communities, which validated Index targets against existing conditions. In 2011, Gladki Planning Associates and du Toit Allsopp Hillier were retained to assess and provide recommendations for the refinement of the HDI.

Health Background Study

Exploration of a Health Background Study requirement as part of the municipal planning and development approvals process is also currently underway in the Peel Region. As part of a joint initiative between Peel Public Health and Toronto Public Health, the services of The Planning Partnership were retained to create a Health Background Study Framework and Terms of Reference in 2011. The framework presents content and criteria that can be implemented in future municipally- or regionally-mandated health background studies (Slomke & Bursey, 2011, p.20).

Structure

Healthy Development Index

The Healthy Development Index in its current form is organized around seven elements of the built environment that are associated with community health: density, service proximity, land use mix, street connectivity, road network and sidewalk characteristics, parking, and aesthetics and
human scale. Each element can be evaluated using a set of specific, quantifiable measures that positively associate with health and physical activity. Measures include target ranges and benchmarks and are designated as either a prerequisite (necessary for approval of the development application) or a credit requirement (awards “bonus” points) (Fig. 12). Individual scores are combined to produce an overall score for the development and the potential to earn a Gold, Silver or Bronze title (see Appendix 5 for initial scoring guide and scorecard).

2. Service Proximity

2.b. Proximity to a Variety of Services – Credit:

- ≥ 75% of residential units within ≤ 800m of ≥ 13 neighbourhood services* (1 credit)
- ≥ 75% of residential units within ≤ 800m of ≥ 16 neighbourhood services* (3 credits)
- ≥ 75% of residential units within ≤ 800m of ≥ 20 neighbourhood services,* including at least 3 food markets,** and at least 1 park ≥ 1/3 hectare (10 credits)
- 100% of residential units within ≤ 800m of ≥ 20 neighbourhood services,* including at least 3 food markets,** and at least 1 park ≥ 1/3 hectare (15 credits)

Description:
Communities can earn credits by meeting the above service proximity target ranges. Distances are measured along the network of walkable streets and paths in the community, where possible.

*Neighbourhood public services include but are not limited to: childcare, community garden, hospital or health clinic, public library, plaza, park or natural open space of ≥ 1/3 hectare, performance/cultural space, post office, recreation centre, and public school. Neighbourhood retail services include but are not limited to: bank, beauty salon or barber, bike shop, convenience stores not located at gas stations, dry cleaner, restaurants and cafes, gym/fitness centre, hardware store, laundromat, pharmacy, retail food market (including supermarket, produce store, butcher), entertainment (e.g., video store or movie theater), and a suitable transit stop (see 2.c. for the definition of a suitable transit stop). Gas stations are not included. Multiple locations of the same service can be counted. A maximum of 2 transit stops per dwelling may be counted towards the above credit measures.

**Food markets include grocery stores, supermarkets, produce markets, and butchers; however, they exclude convenience stores.

Figure 12: Healthy Development Index – Proximity to a Variety of Services (Credit) under Service Proximity Element (CRICH, 2009, p.109).

Health Background Study Framework

The HBS builds from the base provided by the HDI by including six of its seven core elements—aesthetics and human scale is left out as it is currently addressed in existing urban design policies and guidelines (Planning Partnership, 2011b, p.1). The framework outlines a standardized method by which developers can demonstrate their achievement of healthy design and planners can evaluate proposals. Each element contains a rationale, an objective or objectives, associated minimum development standards, key questions, and reporting/content requirements to demonstrate achievement. The key questions add a qualitative and analytical component to the base previously outlined in the HDI. The framework is intended to be “applicable across a range of
different contexts and [to] allow developers to identify and pre-emptively mitigate any potential health hazards associated with their development proposals” (Slomke & Bursey, 2011, p.20).

Implementation: Success and Challenges

According to the researchers that developed the HDI, two key unanticipated lessons emerged from the process of creating an evidence-based Index. First, many elements of the built environment are not at the discretion of planners and development applicants but are instead prescribed through existing by-laws, zoning regulations, and other public agency standards and policies (CRICH, 2009, p.94). Second, many health-promoting features of the built environment are difficult to measure and quantify in the form of consistent development targets (CRICH, 2009, p.94). To complicate matters further, the gap analysis carried out during the creation of the HDI found a lack of unity among pre-existing policies and standards throughout the region and between departments and sectors. Researchers called for the development of common, consistent, inter-sectoral goals so that planning and policy decisions may be directed toward a unified vision of a healthy built environment (CRICH, 2009, p. 20).

As the CRICH team predicted, a key challenge faced at multiple points in the implementation process of the HDI has been addressing conflicts between the Index measures and existing standards and by-laws (CRICH, 2009; Gutmann, 2013). Efforts are currently underway to change municipal standards that do not compliment the intent of the HDI, but this work can be challenging and time-consuming. For instance, the HDI seeks to implement parking maximums, while many zoning bylaws in the region still work with parking minimum standards (Gutmann, 2013).

Initial reactions to the HDI by planners and developers were cautiously supportive. Local planning staff expressed “fear of pioneering” (Slomke & Bursey, 2011, p.27), while the biggest concerns for developers were “transition considerations” for the initial start-up (ibid, p.28) and that the measures be applied consistently and equally to all (ibid, p.28; Gutmann, 2013). “Progressive developers” in particular showed interest as they do not want to see their developments stigmatized as “unhealthy” (Slomke & Bursey, 2011, p. 28).

Public health staff have been working with staff in Planning and Engineering to shape the tool for specific uses and to integrate the elements and measures of the HDI into pre-existing...
review processes (Gutmann, 2013). Rather than implementing the full HDI in every case, in some cases public health staff have implemented only the most relevant sections when working, for example, with Transportation Engineers on Environmental Assessments or Traffic Impact Studies. Public health staff are also considering the implementation of pilot projects using the concepts of the HDI and HBS to allow the region’s municipalities, developers and residents to explore potential uses of the tools before committing to a full policy or program (Gutmann, 2013).

Each of the three municipalities in the Peel Region has engaged with the Healthy Development Index and the Health Background Study Framework on a broad level, and each is implementing the material in different ways. Official Plans at both the regional and municipal level have been amended to highlight the connections between health and planning (Slomke & Bursey, 2011). The Town of Caledon is incorporating the HDI into their secondary plan process, while the City of Brampton is implementing elements of the HDI in their Urban Design Guidelines, ensuring that these measures will be integrated into the planning review process. The City of Mississauga has gone further and is building on the HDI and HBS to develop a Health Impact Statement Terms of Reference which will require developers to evaluate health impacts as part of the development application process (Gutmann, 2013).

Discussion

The focus in the Region of Peel has been on facilitating ease of use and tailoring the elements of the HDI and HBS Framework to for specific contexts. With the exception of the Health Impact Statement Terms of Reference that is currently under development in Mississauga, public health staff have largely worked with planners and engineers to fit the concepts and elements of the HDI into existing processes without creating a new, distinct review process for developers and planners (Gutmann, 2013). Sufficient flexibility to be utilized in different contexts is a strength, but with this there is also a risk of losing the benefits of a comprehensive and integrative tool. Changes to existing by-laws, regulations and standards stemming from the information in the HDI have been its primary outcome thus far.

While Peel Public Health was particularly interested in developing a quantitative, score-based tool to make a stronger impact than they had been able to with previous qualitative responses, this approach has proved to be challenging. A considerable amount of research and
review has been undertaken to address issues with measurement, conflicting standards, and the ability of planners and developers to employ discretion over elements of the built environment (The Planning Partnership, 2011a; Gladki Planning Associates, 2011). One of the key recommendations of the 2011 refinement study was to incorporate a qualitative component in order to address several of the HDI’s challenges (Gladki Planning Associates, 2011, p.12). Further, it was found that the spatial analysis required for some of the indicators was not feasible to conduct and that potential users felt that a system based solely on numerical scoring was of limited use (Gladki Planning Associates, 2011, p.10-12).

The context of the Peel Region’s built environment differs significantly from that of Vancouver. Overall, the region is characterized by traditional suburban development patterns and each municipality presents a different development priority: predominantly infill and densification in the City of Mississauga, infill and greenfield development in the City of Brampton, and greenfield and rural development in the Town of Caledon (Bursey et al., 2011). The primary public health concern in this context is obesity and the constraints that a low density urban form puts on opportunities for daily physical activity, which is clearly reflected in the HDI and HBS’s focus on active living and transportation. The Index is highly quantitative and rigorous in its rationale, but it does not take a comprehensive view of community health.

**Case Study: New South Wales Healthy Urban Development Checklist**

New South Wales is home to Sydney, Australia’s largest city, and is also the country’s most populous state (Fig. 13). The New South Wales Ministry of Health (NSW Health) operates at the state level and manages 15 Local Health Districts, each responsible for providing health services and programs to a specific area. In recognition of the impacts that continued rapid growth and development in NSW could have on health and well-being, NSW Health has become more actively engaged in the planning and development process by conducting and supporting Health Impact Assessments (HIAs) and by providing advice on plans at the region, sub-regional and local government levels (NSW Health, 2009, p.1). This case study explores the development and implementation of the Healthy Urban Development Checklist (HUDC), a tool designed to increase staff capacity in these processes (NSW Health, 2012).
Development

The New South Wales Healthy Urban Development Checklist (HUDEC) was developed in 2009 by Elton Consulting on contract for NSW Health and Sydney South West Area Health Service (SSWAHS). An Executive Committee consisting of representatives from both organizations managed and guided the process (NSW Health, 2009, p.3).

Elton Consulting utilized several methods of research and information-gathering in developing the checklist:

- Review of policy and practice literature around healthy urban development checklists and guidelines in various locales;
- Interviews with practitioners involved in developing or implementing relevant checklists;

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6 As part of the National Health Reform in January 2011, new Local Health District (LHD) boundaries were drawn that replaced the SSWAHS with two new LHDs: Sydney LHD and South Western Sydney LHD.
• Review of academic literature around healthy urban development and its evidence base;
• Consideration of best practice;
• Consultation with key experts and a Reference Group made up of representatives of local government, NSW Department of Planning, Landcom (the NSW Government’s property development agency), academic institutions, NSW Health and Area Health Services;
• Piloting of the checklist by Area Health Service workers in both active and retrospective pilot cases (NSW Health, 2009, p.3).

Structure

The HUDC is in the form of a guidebook with chapters based on ten key characteristics of healthy urban development: healthy food, physical activity, housing, transport and physical connectivity, quality employment, community safety and security, public open space, social infrastructure, social cohesion and social connectivity, and environment and health. An eleventh chapter on environmental sustainability and climate change is forthcoming. Each chapter contains several sections which introduce the issue, explain its relevance to NSW with reference to data and local areas of concern, provide points of key evidence and leading practice (often with an eye to equity considerations), pose key questions and more specific questions, and provide links to further information on the particular characteristic (see Appendix 6 for sample chapter). The chapters are supplemented by background information on the development of the checklist and on the relationship between health and urban development, an overview of the NSW planning context, and detailed guidelines for when and how to use the checklist. An interactive version has also been created which allows users to complete and save the checklist online.

The HUDC was designed primarily as a tool to assist Area Health Service staff in preparing responses to policies, plans and proposals in NSW. The primary questions it helps answer are:

• What are the health effects of the urban development policy, plan or proposal?
• How can it be improved to provide better health outcomes?

(NSW Health, 2009, p.2).

The key questions and checklist questions form the basis for the user’s response by encouraging descriptive and analytical written answers. Checklist questions are nested under the broader key questions and each is identified as being relevant to higher level planning policies and strategies, to
development proposals, or to both. Questions that relate specifically to urban form, as opposed to the objectives or intent of a policy or strategy, are also identified (Fig. 14). Several questions are repeated and cross-referenced in different chapters, which highlights the inter-related nature of the characteristics of healthy development (NSW Health, 2009, p.32).

To assist users with the preparation of written responses to plans, policies and proposals, the HUD checklist provides a Checklist Summary Form and a Healthy Urban Development Advice Form. The Checklist Summary Form is designed to keep track of responses to each chapter with spaces for health promoting attributes, attributes that do not promote health, significant issues and recommendations or suggestions. The Healthy Urban Development Advice Form assists with organizing and focusing written comments by encouraging the user to think broadly about the health implications of the proposal, including potential cumulative impacts, and the groups likely to be more disadvantaged or advantaged. It also asks the user to provide supporting evidence for priority issues and recommendations. In addition to facilitating written responses, the HUDC also encourages health workers to communicate with planners throughout their assessment process for clarification and feedback.
15. Social Cohesion and Social Connectivity

Key Questions

How does the policy, plan or development proposal:

- (SC1) Provide environments that will encourage social interaction and connection amongst people?
- (SC2) Promote a sense of community and attachment to place?
- (SC3) Encourage local involvement in planning and community life?
- (SC4) Minimise social disadvantage and promote equitable access to resources?
- (SC5) Avoid community severance, division or dislocation?

Checklist Questions

SC5: Avoid community severance, division or dislocation

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<thead>
<tr>
<th>Code</th>
<th>Question</th>
<th>Planning Policies and Strategies</th>
<th>Development Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC5.1</td>
<td>Are vulnerable or disadvantaged groups likely to be displaced or disadvantaged by the plan or proposal? If so, what strategies are proposed to minimise impacts and support individuals and groups?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SC5.2</td>
<td><strong>URBAN FORM</strong> Does the policy, plan or proposal promote physical integration with adjacent areas and existing development (through road connections, layout, open space network)?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SC5.3</td>
<td>Are there any physical structures such as main roads, rail lines or industrial estates that will create barriers to movement and sever connectivity between communities?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SC5.4</td>
<td>Does the policy, plan or proposal encourage social integration across communities, for instance through the provision of community facilities that can also benefit adjacent areas?</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>


Four guiding principles underpin the development and implementation of the HUD checklist:

- Equity – “...access to all aspects of a community (including health, safety, open space, transport and economic development) is fair to all residents regardless of socioeconomic status, cultural background, gender, age or ability.” (NSW Health, 2009, p.13)
- Early engagement – “...maximum influence can be exercised when there are opportunities to participate in the policy or plan making process and contribute at the earliest possible stages of a project’s inception.” (NSW Health, 2009, p.14)
• Interdependence – “...it is important to maintain an understanding of the links between these elements and the interdependence of the relationships between them.” (NSW Health, 2009, p.15)
• Building partnerships – “Healthy urban development is an area of work where a multidisciplinary and collaborative approach is essential.” (NSW Health, 2009, p.15).

Implementation: Successes and Challenges

The HUDC is currently being widely used by health staff in developing commentary on new proposals. It has been applied most often to development applications, as they are a more regular occurrence, but has also been used to evaluate and assist in the development of higher level policy plans (Thornell, 2013). The checklist has been used in other Australian states and NSW Health has also received feedback from users in other parts of the world (Thornell, 2013).

In addition to facilitating staff review and commentary, other objectives of the HUDC include “support[ing] engagement between urban planners and developers and health professionals” and “inform[ing] others (planners, developers, policy makers) about the range of factors that need to be considered in healthy urban development” (NSW Health, 2009, p.2). Thus far, the tool has been effective in improving conversations and relationships between public health staff and planners (Thornell, 2013). Two evaluations relating to HUDC usage have already been conducted with reports forthcoming. One evaluation surveyed potential users of the HUDC and found that a high percentage had read and/or used the checklist (Simpson et al, 2012). Key findings among respondents who had used the checklist in their work include:

• 79% felt that it had improved their understanding of the links between the built environment and health
• 82% felt it had improved their confidence in incorporating health-promoting features into development plans, proposals and policies
• 94% rated the checklist ‘very easy’ or ‘somewhat easy’ to use
• 88% said they would use the HUDC in their work again

(Simpson et al, 2012).
A forthcoming evaluation of all SSWAHS commentary on land use plans and proposals also found that the HUDC was a useful guide for health service workers and recommends its continued use (Chok et al, 2013).

**Discussion**

One of the key factors in the success of the HUDC is that it was designed for use in a very specific process that NSW Health already had a mandate to carry out. Health staff were already engaged in providing advice in planning and development processes, and the checklist was created to increase consistency and to develop capacity to influence these processes (NSW Health, 2009, p.2). Implementation of the HUDC for its intended purpose has thus been very successful, and it has attracted considerable interest throughout Australia and in other parts of the world. A key strength is that the checklist also lends itself to adaptation for other contexts and locales. The extensive supplemental information and health evidence makes the content of the HUDC widely accessible even to those without a public health background.

The HUDC is the only case study tool to explicitly articulate a set of guiding principles—equity, early engagement, interdependence and building partnerships—and to show evidence of them throughout the content of the tool. Each chapter addresses issues of equity and the Healthy Urban Development Advice Form encourages the user to consider groups that may be more advantaged or disadvantaged than others by the proposal under evaluation. The HUDC articulates a broad view of health and emphasizes the interrelation of the elements that constitute healthy development.

The absence of targets throughout the checklist means that there is no specific benchmark against which users can measure the characteristics of a plan or development proposal; however, the qualitative approach facilitates a deeper level of analysis than target or score-based tool. By focusing on qualitative evaluation, the HUDC is able to give better consideration to elements such as community safety and security and social cohesion and connectivity that are more difficult if not impossible to measure in concrete terms. Other communities wishing to adapt the HUDC could weave targets and indicators into its qualitative structure in order to meet their particular objectives.
5. ANALYSIS AND DISCUSSION

Each of the tools outlined in the preceding chapter represents a different approach to evaluating and influencing the health impacts of planning and development decisions. This chapter discusses some common themes and lessons that can be drawn from the development and implementation of the case study tools. It then assesses existing strengths and opportunities on which the City of Vancouver can capitalize in the process of creating and implementing a toolkit.

Addressing the social determinants of health through healthy planning and development tools

As outlined in Chapter 2, although city or municipal planning cannot regulate or directly influence all of the social determinants of health, which are often taken up by other regional, provincial and federal governance bodies, it nonetheless has a critical role to play in supporting the health of people, communities and environments. Planning and development decisions shape not only the built environment, but also impact the social, environmental, and economic environments, which together provide the context for community and individual health. Considering health and well-being in a holistic and integrated way is crucial to meeting the intersecting challenges of the 21st century and upholding the now ubiquitous vision of the three pillars of sustainability. A comprehensive tool can be a valuable way to communicate information across disciplinary and agency boundaries and an opportunity to educate and promote dialogue around a broad notion of health.

A healthy planning and development tool can provide an opportunity to consider the social impacts of planning, and the relative equity in the distribution and intensity of these impacts across social groups, in a systematic way that is not typically achieved in current practice. Connecting these impacts to the bigger picture of overall health and well-being encourages the consideration of social impacts on vulnerable groups to be understood not as an isolated, ‘special interest’ issue that only applies to a small minority, but rather as a vital and interconnected component of a healthy city for all residents. Moreover, an evaluation tool allows information to be shared between departments, with developers, and with the public, facilitating a consistent understanding of health objectives and how they may be achieved. Municipal planning departments can only impact the social determinants of health to a certain degree when working in isolation, but can achieve more outside their traditional jurisdiction through cross-agency collaboration and efforts with other
government bodies, such as health authorities and school boards, as well as the growing number of civil society organizations engaged in work around health and well-being.

**Key themes and lessons from case studies**

**Different tools for different purposes**

The diversity of possible approaches to healthy planning and development tools is made apparent through the four case studies—the approach taken in each one reflects a different purpose and a unique local context. A tool that is largely meant for use within a government health agency, such as NSW’s Healthy Urban Development Checklist, will follow a different process and yield a different outcome than one designed to be integrated into the planning regulatory process, such as Peel’s HDI and HBS. Checklists and indicator systems are the two main toolkit components seen in the case studies. NSW and the Region of Peel both developed checklist-style tools only, and the vast differences in content and format between the two reflect the different context and purpose behind each. Philadelphia developed only an indicator system, which aimed to measure progress toward city-wide plan objectives, and San Francisco was the only jurisdiction that developed both a checklist and an indicator system.

A checklist-style development assessment component is critical if the intent is to make a tangible impact on the healthfulness of planning and development decisions. This can take one of two general formats: a target-based assessment that requires yes/no answers, such as the Healthy Development Checklist in San Francisco’s SCI or the Region of Peel’s HDI, or a qualitative assessment that facilitates longer, more descriptive responses, such as NSW’s checklist or the key questions in Peel’s Health Background Study Framework. The relative pros and cons of these formats are discussed in more detail below, but both ultimately aim to assess proposals with their potential health impacts in mind.

An indicator system is a valuable tool because it allows baseline conditions to be assessed and progress toward health objectives to be measured. The indicators that make up San Francisco’s SCI and Philadelphia’s PHILATool measure physical, social and economic conditions that are shaped by a number of forces in addition to local planning decisions, but they allow comparisons to be made across their respective cities and highlight particular issues of concern in different
neighbourhoods. If a tool is to effectively address inequities in health and well-being, it must first identify where and what those inequities are.

San Francisco’s experience with the SCI shows that the two components can work well as part of the same toolkit, allowing users to both evaluate existing conditions and needs, and then assess the qualities of a plan or proposal in relation to their findings. The Healthy Development Checklist and Indicator System components of the SCI are organized according to the same objectives and the checklist targets are cross-referenced with applicable indicators (where they exist) in the accompanying User’s Guide. Including both components in the toolkit and connecting them to each other allows for more versatility in application and facilitates a more thorough analysis of healthy planning and development than either tool could do in isolation.

The diverse approaches in the case studies also illustrate the necessity of designing a locally-specific toolkit. A toolkit’s structure and content must be responsive and relevant to the local planning and public health context and to the locality’s key issues of concern, rather than uncritically adopting an approach taken elsewhere.

**Partnerships between planning and public health**

A common thread running through each of the case study jurisdictions is significant involvement from public health agencies in the development and implementation of the tools and in the planning process more generally. The San Francisco Department of Public Health (SFDPH) co-developed the SCI with the ENCHIA Community Council and is now responsible for managing and refining the tool. The SFDPH has also utilized the SCI to conduct detailed health impact analyses of numerous plans, projects and policies leading to a number of changes and new policies in the city (Sustainable Communities Collective, 2012e). Peel Public Health has been reviewing development applications in the region since 2005 and provided the impetus for the development of the Healthy Development Index (HDI) and the Health Background Study (HBS) Framework. Public health staff members are now working closely with planning and engineering departments at the regional and municipal levels to refine the tools for different purposes and to integrate them into existing processes. Similarly, NSW Health is engaged in planning by providing advice on plans and development proposals and was instrumental in the design of the HUDC. NSW Health and local area health staff now use the HUDC heavily when preparing commentary on proposals. In Philadelphia,
the Department of Public Health (PDPH) launched the Get Healthy Philly initiative, supported the position of the Healthy Communities Coordinator (HCC) and advocated for the integration of health considerations into the Zoning Code update and the *Philadelphia2035* planning process. In each of these cases, the impetus for the development of the tool came from within the public health agency and, taken together, they suggest that public health agencies have an invaluable role to play in developing and implementing these types of tools—in some cases, far more so than planning departments.

The Vancouver case is thus unique in that interest in creating a toolkit has emerged in the Social Policy department as a result of the process and outcomes of the DTES Social Impact Assessment (as outlined in Chapter 3) and the ongoing development of the Healthy City Strategy. As a result, if the City decides to pursue a healthy planning toolkit, it will be developed in a different organizational context than any of the case study tools. However, the process is intended to be strongly collaborative, and Vancouver Coastal Health (VCH) has been supportive of the initial toolkit idea. The developing partnership and MOU between the City and VCH (see Chapter 3) is an opportunity for the City to engage public health staff as partners in the creation of a toolkit—a reversal of the typical course of action in the case studies. Sharing resources, such as data, background research, and staff capacity, between the organizations will facilitate the creation of a more robust and supported tool.

**Gaining support among competing interests**

The Philadelphia case study in particular illustrated how challenging it can be to garner political and organizational support for health-based evaluation of development in a climate of competing interests. Although there was a mandate in Philadelphia to integrate the promotion of health into the city-wide plan and zoning code updates, more traditional land-use planning concepts such as density and mixed use development took precedence, which can be considered a missed opportunity given the clear health implications of these concepts. Health offers a valuable lens through which to view and integrate existing planning work without necessitating a full overhaul in priorities and processes. However, as in Philadelphia, there can be hesitation to this reframing when a major planning process is already underway. San Francisco and Peel Region have had more success in this regard—in San Francisco, pressure for health-based evaluations in
planning came from communities groups, while in Peel, both municipal and regional levels of government have shown a strong commitment to working toward health objectives.

As this paper has reiterated, a holistic approach to planning is necessary to meet current challenges, but making this shift can be difficult when disciplinary boundaries and job descriptions seem entrenched. Sustainability is currently the core principle underpinning planning in most municipalities, and though the three pillar approach is widespread, environmental sustainability and “green” development are typically the focus given the impending consequences of climate change and resource depletion. Over the past few years, the City of Vancouver’s primary agenda has been its Greenest City initiatives. A broad approach to health makes it clear that health and sustainability are two sides of the same coin, but changing the conversation to articulate this notion is likely to be challenging.

Stakeholder input and collaboration

An effective healthy planning and development tool cannot be created without involving the stakeholders who will eventually use it, or whose work will be impacted by its implementation, in the process of its design. Each of the case study tools was developed in consultation with a varying combination of government, planning, development, public health and other representatives. San Francisco’s SCI is unique in that a particularly diverse group of community representatives collaborated with SFDPH in its creation.

An inclusive process increases the likelihood that the finished product will be relevant, useful and feasible. Along with the collaboration with Vancouver Coastal Health as outlined above, the creation of a potential toolkit in the City of Vancouver would benefit from having, at the very least, representatives from Social Policy, Social Infrastructure, Planning, Engineering, Transportation, Housing, Sustainability, the Board of Parks and Recreation, and the Community Centre Association, as well as private developers, involved in the process. Outside agencies and organizations, such as the Vancouver School Board, BC Housing, Metro Vancouver, TransLink, Vancouver’s Neighborhood Food Networks, and other community groups could be brought into the discussion as suitable.
Staff support and resources

In addition to the involvement of a wide range of stakeholders in the design of a tool, sufficient staff resourcing within the agency or department leading the process is critical to ensuring that a tool can successfully launch. San Francisco’s SCI has a leadership team of seven – five from SFDPH and two from other organizations. Each member of the team has a specific role in the maintenance and continuing evolution of the SCI (Sustainable Communities Collective, 2012f). Both Peel Public Health and New South Wales Health similarly have several staff members supporting their respective tools. Philadelphia was the only case study in which the majority of the responsibility for developing the tools fell on a single individual, and it proved to be a drawback. A tool or toolkit will also require continued engagement over time as lessons are learned through implementation. A staff team (likely within Social Policy), with the capacity to manage the continued evolution of a toolkit and to liaise with users in other departments, agencies and groups, would be valuable in ensuring its uptake.

Objectives and guiding principles

A fundamental component of an effective tool is a clear set of objectives to guide its content. Objectives are broad statements that articulate a desired outcome that healthy development could contribute to achieving. Each case study reflects a different approach:

- Philadelphia’s shaped their PHILATool indicator system according to health-promoting objectives in the city’s new citywide plan
  
  Example: 1.1.2. Strengthen neighborhood centers by developing viable commercial corridors (City of Philadelphia, 2011c);

- the SFDPH and ENCHIA Community Council designed a set of community health objectives specifically for the SCI’s indicator system and development checklist
  
  Example: PR.5 Assure access to daily goods and service needs (Sustainable Communities Collective, 2012g);

- and the Region of Peel’s Health Background Study Framework added descriptive objectives to the elements originally outlined in the HDI
  
  Example: Service Proximity – To achieve a reasonable proximity and cluster of uses, based on walking distance, of key services and employment opportunities to
residences and transport nodes. This level of proximity promotes physical activity (walking or cycling), improves mental health by stimulating greater community interaction, and creates a feasible alternative to automobile use, while at the same time reducing greenhouse gas emissions. At the appropriate scale, a community should have a full array of uses (The Planning Partnership, 2011c, p.5).

In contrast, the NSW Healthy Urban Development Checklist does not outline specific objectives to be pursued for each element, but the guiding principles—equity, early engagement, interdependence and building partnerships—and the rationales provide an appropriate sense of purpose for the evaluation questions.

Whether addressed through objectives, principles, or rationales, it is vital that a tool communicates to the user why a particular target, indicator, or question is included, and what the intended outcome is. The health and well-being objectives currently being developed through the Healthy City Strategy will connect with objectives present in other plans and strategies and thus could provide a valuable guiding framework for a healthy planning and development tool.

Quantitative vs. qualitative assessments

A checklist-style development assessment tool can be structured in one of two basic ways:

- a quantitative, target-based assessment that requires yes/no answers (such as the Healthy Development Checklist component of San Francisco’s SCI) or assigns a score based on the achievement of a set of benchmarks (Region of Peel’s Healthy Development Index); or
- a qualitative assessment that encourages longer, more descriptive responses (such as New South Wales’ Healthy Urban Development Checklist).

Both approaches have benefits and drawbacks. A quantitative approach clearly articulates the characteristics that are expected and/or desired in a development, providing a tangible measure against which a proposal can be evaluated. A scoring system can also provide an easy way to determine the strengths and gaps in a proposal. However, challenges emerge in measuring or attempting to make tangible certain aspects of healthy development, particularly in the social realm. Even within the more physical aspects of the built environment, it can be difficult to create an effective measurement or target or to conduct the spatial analysis necessary to assess certain targets, as was found through the Region of Peel case study.
In contrast, a qualitative approach does not offer concrete targets, which may make assessments more onerous and dependent on individual discretion. The strength of this approach, however, is in its potential to encourage education and reflection about the impacts of developments, and to leave room for an issue to be addressed in multiple ways. Complex social characteristics may also be better addressed through qualitative questions more effectively than a yes/no target. For example, a target-based approach may ask: “is the project within ½ mile of a public facility for community events and functions?” (Sustainable Communities Collective, 2012d, p.9), while a qualitative approach may ask: “will the policy, plan or proposal provide venues for community and cultural events and activities that are conveniently located, accessible and easily reached by public transport?” (NSW Health, 2009, p.126). In this example, the qualitative approach encourages consideration of the convenience and accessibility of a venue, rather than just asking if a development has such a venue in close proximity. Moreover, a qualitative assessment can also ask broader-scale questions such as: “how does the policy, plan or development proposal promote a sense of community and attachment to place?” (NSW Health, 2009, p.126). While this question may be difficult to answer with any level of certainty, it invites reflection on the topic and could potentially highlight positive or negative aspects of a proposal that would be missed in a quantitative assessment.

Ultimately, each approach can work well depending on the context and the intended purpose of the tool. If the City of Vancouver pursues a development assessment checklist as part of an eventual toolkit, the specific purpose should be well-articulated and the appropriate quantitative or qualitative format chosen accordingly.

Required vs. voluntary tools

As the case studies have shown, a checklist-style development assessment tool can operate in one of several ways:

- A set of targets that a development proposal must meet as a condition of approval (as the Region of Peel is working toward with the elements of the Healthy Development Index);
- A set of voluntary targets that are not necessary for approval, but may offer additional recognition or certification for a development (as SFDPH is working toward with the SCI’s Healthy Development Checklist);
• A qualitative review undertaken by public health staff to aid the provision of commentary and advice on plans and proposals (such as NSW’s Healthy Development Checklist); or
• A written review addressing core issues and the achievement of minimum standards that development applicants must submit as part of a complete application (as the Region of Peel is working toward with the Health Background Study and the City of Mississauga’s development of a Health Impact Statement Terms of Reference).

A required tool has the benefit of regulatory power; however, it also has the potential to lose strength as it becomes a required process and attempts are undertaken to make it more palatable. A healthy planning and development tool should ‘think big’—a set of required standards that simply reflect existing policies and guidelines will not yield more healthful development. However, if new standards are set, non-complimenting policy must be amended and brought into alignment which can be a time-consuming and onerous process. The Region of Peel, in particular, has struggled with this in their attempts to integrate HDI measures into existing planning processes. A voluntary tool, on the other hand, risks irrelevance as it lacks regulatory power, but may be able to challenge the status quo more effectively—as San Francisco’s SCI has—by advocating for higher standards, educating users on the health impacts of development and encouraging dialogue between stakeholders.

Relationship-building, collaboration and education

As illustrated throughout the case studies, one of the most valuable outcomes of the process of developing and implementing a tool or toolkit can actually be the dialogue that is created between public health staff, planners, developers and citizens. Opportunities for education and improved communication throughout the process can build capacity across organizations to better address the complex issues of health and well-being. In this way, a toolkit can have both direct impacts through the changes it promotes in developments, and indirect impacts through the additional outcomes of the relationships that are promoted.

Potential limitations

The value of a checklist-style development assessment tool or an indicator system tool can become limited if it is applied uncritically and rigidly or is used as a replacement for thoughtful analysis. Every plan and development proposal is embedded in a very specific context, and even a
A well-designed tool can only capture these specificities to a certain degree. A tool that incorporates qualitative analysis can help to mitigate these limitations, as can an emphasis on opportunities for relationship-building, collaboration, and education as outlined above.

**City of Vancouver strengths and opportunities**

The City of Vancouver has a number of existing strengths that can be built on and opportunities that can be seized in the creation and implementation of a healthy planning and development toolkit:

- As these tools have typically stemmed from public health agencies, Vancouver would be unique in having a tool developed collaboratively between the City and VCH, with Social Policy convening an integrating table that would bring together different departments from across both organizations. Though Social Policy is a separate department from Planning, the two often work closely together which may be beneficial for cultivating buy-in and integrating a tool into existing planning processes.

- Social Policy has a unique and valuable opportunity to develop a tool in connection with the Healthy City Strategy—none of the case study jurisdictions had such comprehensive health and well-being strategies underscoring their tools. The integrative approach of the HCS and its linkages to other City plans and strategies can provide a framework for developing particularly robust content and effectively addressing the social determinants of health within a toolkit.

- The City of Vancouver has a great deal of health-supporting policies already in place that can provide a starting point for a development assessment tool. By first bringing together and applying a health and well-being lens to existing guidelines and requirements, gaps can be better identified and addressed.

- A considerable amount of data organization and city-wide mapping work is currently underway in Social Policy, and this can provide a strong base for an indicator system toolkit component.

- A publicly accessible interface with elements geared toward multiple types of users could be an effective way to engage the public around the objectives of the Strategy and around health and well-being more generally.
Another valuable opportunity exists in connecting a city-wide toolkit with a potential DTES-specific tool as it emerges from the SIA and to learn from the process as it transpires. The creation of a DTES tool could effectively be used as a “pilot study” to gauge reactions from the development community and to identify what barriers to implementation exist. The community engagement phase of the SIA can also serve as a model for engaging marginalized groups around the development and implementation of a toolkit.

The MOU currently in development between the City and Vancouver Coastal Health presents an opportunity to engage VCH in the creation of a healthy planning and development toolkit, particularly through the establishment of a Healthy City Steering Committee.

Most large-scale developments in Vancouver occur through rezoning to CD-1 (Comprehensive Development District), in which bylaws can be tailored to the specific site and intended development. Rezonings would thus be a vital point at which to insert a health-based review.

A toolkit could be usefully employed in the process of developing a new city-wide comprehensive plan, should the City undertake such a process in the near future.
6. RECOMMENDATIONS

The central recommendation emerging from the case studies and analysis in this report is that the City of Vancouver should pursue the creation and implementation of a healthy planning and development toolkit. Because the City of Vancouver does not have a department of public health within the organization with the capacity to review development applications at a detailed level, a tool geared toward planners and developers and intended to be introduced at an early stage in the development application process is likely to be the most suitable approach. The following recommendations are proposed to the City of Vancouver and aim not to prescribe very specific actions and content, but rather to provide a set of considerations and to act as a guide moving forward.

1. **Determine and clearly articulate the purpose, specific process, and intended users of the toolkit.**
   
   **Rationale:** Understanding and communicating the intent of the tool from the beginning of the process will help to ensure that it is appropriately tailored and will increase its chances of successful implementation.

2. **Engage the intended users and other stakeholders early in the process of creating the toolkit.**
   
   **Rationale:** An inclusive process will increase the likelihood that the toolkit will be well-received, instead of being viewed as onerous (if required), or irrelevant (if voluntary). The process of building relationships while developing the toolkit is likely to be as important as the content of the final product.

3. **Ensure sufficient staff resourcing (i.e. a dedicated team) to support the development and implementation of the toolkit.**
   
   **Rationale:** Sufficient support is essential to success, particularly in the early stages. This could be achieved by assigning a Social Policy team, along with a liaison group of representatives from different city departments, outside agencies, community organizations and the community at-large to develop and manage implementation of the toolkit.
4. If a Downtown Eastside-specific tool stemming from the SIA is created, use the process as a pilot study for a set of city-wide tools.

   **Rationale:** The process of designing and implementing a DTES development tool offers an opportunity to gauge stakeholder reactions and to identify barriers or issues specific to the Vancouver context.

5. Leverage the opportunity to connect a healthy planning and development toolkit with the Healthy City Strategy.

   **Rationale:** The Healthy City Strategy offers an unmatched opportunity to take a coordinated, rather than piecemeal, approach to integrating healthy planning principles in the City. It is also an opportunity to introduce a toolkit when interest around health is already piqued.

6. The tools in the toolkit should support two primary objectives:

   - Assess how well plans and/or development proposals address health objectives (i.e. a development checklist or review), and
   - Track indicators of health at the neighbourhood level to set baselines and measure progress (i.e. a health and well-being indicator system).

   **Rationale:** Evaluation of existing neighbourhood conditions and needs provides an important context for assessing plans and proposals.

7. Create a development review that can be tailored to different scales (e.g. a brief checklist for small developments and a longer qualitative review for large-scale developments and rezonings).

   - **Rationale:** Tailoring the toolkit can better address the magnitude of impacts that different scales of development are likely to have. A major mixed-use development will have a much greater effect on the physical and social environment of its surrounding neighbourhood than will a smaller infill project—and each should thus require a different level of review.

8. Use the three strategic directions and 20 building blocks of the Healthy City Strategy as the framework and guiding principles of a toolkit.

   **Rationale:** The 20 building blocks in the Healthy City Strategy provide a well-rounded framework and background on which the elements of a development assessment
tool and/or indicator system could be based. The overarching vision and three strategic directions of the Strategy can also provide a consistent vision and purpose to guide the application of the toolkit.

9. Draw from existing regulations, guidelines, targets and standards first.
   **Rationale:** Incorporating existing policy into the toolkit first will prevent duplication and will allow gaps to be identified and filled in.

10. The tools should facilitate consideration of groups that are most likely to be impacted by development decisions, and particular consideration should be given to marginalized or vulnerable groups.
    **Rationale:** Particular groups of people will be more strongly impacted than others by changes to physical and social environments. Asking the user to consider how a proposal addresses the needs of different groups—and marginalized groups in particular—can help to raise awareness and contribute to shaping more inclusive environments.

11. A checklist component should go beyond considering the simple presence or absence of particular features to also consider issues such accessibility and local relevance.
    **Rationale:** Amenities such as parks, community meeting space, or grocery stores are valuable to a neighbourhood, but their presence alone does not ensure health and well-being benefits. These amenities must be easily accessible and designed to meet the specific needs of the surrounding community if they are to be well-used and, thus, to contribute to healthy outcomes.

12. The toolkit should allow for the consideration of indirect and cumulative impacts.
    **Rationale:** Health impacts do not always occur as a direct result of particular features of a development. Many impacts may not be immediately obvious and still more may emerge as the result of several development decisions in an area over time. The content of the toolkit should draw attention to this fact and encourage the user to consider the proposal in the context of other recent developments in the surrounding area.

13. Consider creating and supporting a publicly accessible toolkit component.
    **Rationale:** A publicly accessible tool in the vein of San Francisco’s SCI can raise awareness around the impacts of planning and development decisions on health
and well-being and can provide an opportunity for residents and community groups to conduct their own assessments of plans and proposals.

7. CONCLUSION

The research presented in this report represents an initial look at how four jurisdictions have incorporated tools for the systematic evaluation and management of health impacts into their planning and development review process. These tools are relatively new, and though it remains to be seen just how significantly their implementation will influence decisions and lead to improved health and well-being outcomes, their capacity to facilitate deeper thought about interconnected health impacts—rather than just setting requirements in separate ‘silos’—is promising. Health is a valuable and inclusive lens through which to view and evaluate the planning and development of our cities, and it does not preclude other priorities or necessitate an overhaul in policies and processes; rather, it allows existing plans, policies, guidelines and standards to be aligned in pursuit of a broad vision of a thriving city.

Vancouver is changing rapidly and the pressure for development and densification is spreading beyond the downtown peninsula into established neighbourhoods characterized primarily by single-family homes. While the City already has a great deal of health-promoting policy and work underway, a health and well-being assessment tool has the potential to integrate and inform, thus shaping the process of change for the better. As health impacts are attracting renewed attention in planning, and tools that attempt to evaluate and manage these impacts only just beginning to emerge, Vancouver has an opportunity to continue its sustainability leadership in the realm of social sustainability through the creation and implementation of a healthy planning and development toolkit.
8. REFERENCES


9. APPENDICES
APPENDIX 1:

City of Vancouver Policy Report to Vancouver City Council (May 10, 2005)
TO: Vancouver City Council

FROM: Director of Social Planning, in consultation with the Manager of the Sustainability Group

SUBJECT: Definition of Social Sustainability

RECOMMENDATION

THAT Council adopt the proposed definition of Social Sustainability, as described in this report and attached as Appendix A, to be used for developing the social component of the City’s sustainability objectives.

GENERAL MANAGER’S COMMENTS

The General Manager recommends approval of the foregoing Recommendation to support the City’s interest in addressing the three components of sustainability, namely, economic, social and ecological. This definition of social sustainability supports the work staff is currently undertaking to develop an overall social development plan for the City which will be reported shortly. Staff is also discussing the importance of culture in conjunction with the new City Creative Task Force and will report back to Council regarding cultural sustainability.

COUNCIL POLICY

On April 23, 2002 City Council adopted a definition and principles for sustainability as a basis for City actions and operations.
PURPOSE AND BACKGROUND

The City’s definition of sustainability notes that there are three components to sustainability: economic, social and ecological. This report provides a definition of social sustainability to clarify what it is and what steps need to be taken to ensure it.

In April 2002, Council approved the following definition of sustainability, and endorsed sustainability as a guiding principle for future development:

A sustainable Vancouver is a community that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is a place where people live, work, and prosper in a vibrant community of communities. In such a community sustainability is achieved through community participation and the reconciliation of short and long term economic, social and ecological well-being.

In April 2002, City Council directed staff to, “as a matter of ongoing program improvements, review existing policies and programs with a view to applying the City of Vancouver’s Principles for Sustainability throughout the City organization.” The definition of social sustainability proposed in this report further enhances the City’s ongoing work towards a sustainable city. In April 2005, Council further requested that staff bring forward a definition of sustainability.

The City’s commitment to sustainability reflects the growing awareness that actions taken by governments must conserve resources and minimize negative impacts on the environment and community. Social sustainability deals with complex issues such as quality of life, health, equity, liveability, and social inclusion. The overall objective of social sustainability has significant implications for the long-term health of communities and citizens. A common definition and understanding of social sustainability principles are important to move forward. This report responds to Council’s request for clarity regarding social sustainability and builds on previous information presented to Council in 2005.

DISCUSSION

The definition presented in this report builds on the GVRD’s Social Issues Subcommittee (SIS) definition of social sustainability that was developed from a number of sources including local experience and expertise, global literature on social sustainability, and the ideas generated at a GVRD June 2002 forum on social sustainability. The GVRD-SIS definition encompasses commonly held themes and concepts and has been used as a basis for the following definition:
Social Sustainability - a definition

For a community to function and be sustainable, the basic needs of its residents must be met. A socially sustainable community must have the ability to maintain and build on its own resources and have the resiliency to prevent and/or address problems in the future.

There are two types or levels of resources in the community that are available to build social sustainability (and, indeed, economic and environmental sustainability) - individual or human capacity, and social or community capacity.

Individual or human capacity refers to the attributes and resources that individuals can contribute to their own well-being and to the well-being of the community as a whole. Such resources include education, skills, health, values and leadership.

Social or community capacity is defined as the relationships, networks and norms that facilitate collective action taken to improve upon quality of life and to ensure that such improvements are sustainable.

To be effective and sustainable, both these individual and community resources need to be developed and used within the context of four guiding principles - equity, social inclusion and interaction, security, and adaptability.

Staff propose that this definition be adopted as the basis of our work towards the City fulfilling its sustainability goals. The following components and principles are intended to expand on the definition presented above and provide a more detailed context for the City’s work.

Social sustainability encompasses three components:
  1) basic needs such as housing and sufficient income that must be met before capacity can develop;
  2) individual or human capacity or opportunity for learning and self development; and
  3) social or community capacity for the development of community organizations, networks that foster interaction.

The above components are underpinned by four guiding principles:
  1) equity,
  2) social inclusion and interaction,
  3) security, and
  4) adaptability.

A further explanation of the components and guiding principles is provided in Appendix A. These components and principles help to clarify and guide the use of the social sustainability definition.

This social sustainability definition was tested last year in the Official Development Plan for Southeast False Creek. The definition proved to be very useful in clearly identifying aspects of the plan that were critical to ensuring the community was sustainable.
The social sustainability definition also helped to demonstrate the inter-relationships with the other two components of sustainability. For instance, urban agriculture was presented as an environmental initiative, while the community garden version of urban agriculture was included as an example of community development, one of the components of social sustainability.

FINANCIAL IMPLICATIONS

There are no financial implications with approving this definition.

SOCIAL IMPLICATIONS

Within the municipal mandate, the City contributes extensively to the maintenance and enhancement of the social environment. Application of the social sustainability definition to City actions will help ensure they are continuously done in a way that enhances and supports the social infrastructure of the city.

SUSTAINABILITY IMPLICATIONS

The City’s sustainability definition and principles provide a general guide for sustainability. However, as policies and programs are being developed and reviewed for their sustainability, and specific sustainability initiatives are being developed, a more precise definition of each of the three components of sustainability is required. The proposed social sustainability definition provides a framework for the City’s efforts in ensuring overall sustainability and, in particular, supports the social aspects of community life.

CONCLUSION

The definition of social sustainability (including the guiding principles and the list of required components based on the work of the GVRD Social Issues Sub-committee) can and should be used to guide the City’s work on sustainability.
SOCIAL SUSTAINABILITY

1. Definition:
For the purpose of the City’s work, the following is the definition of social sustainability:

<table>
<thead>
<tr>
<th>Social Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a community to function and be sustainable, the basic needs of its residents must be met. A socially sustainable community must have the ability to maintain and build on its own resources and have the resiliency to prevent and/or address problems in the future.</td>
</tr>
<tr>
<td>There are two types or levels of resources in the community that are available to build social sustainability (and, indeed, economic and environmental sustainability) - individual or human capacity, and social or community capacity.</td>
</tr>
<tr>
<td>Individual or human capacity refers to the attributes and resources that individuals can contribute to their own well-being and to the well-being of the community as a whole. Such resources include education, skills, health, values and leadership.</td>
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<td>Social or community capacity is defined as the relationships, networks and norms that facilitate collective action taken to improve upon quality of life and to ensure that such improvements are sustainable.</td>
</tr>
<tr>
<td>To be effective and sustainable, both these individual and community resources need to be developed and used within the context of four guiding principles - equity, social inclusion and interaction, security, and adaptability.</td>
</tr>
</tbody>
</table>

2. Required components of social sustainability

Social sustainability can be understood to be made up of three required components and four guiding principles. The three components of social sustainability are (1) basic needs, (2) individual or human capacity and (3) social or community capacity.

1. Basic needs of residents can continue to be met through:
   - Appropriate, affordable housing, with flexibility to meet changing needs - the needs of those on low and moderate incomes, the needs of those with special circumstances such as physical and mental illness, and the needs of all as they age
   - Appropriate, affordable health care available in the community
   - Locally produced, nutritious food that is affordable
   - Jobs that enable people to be productive and utilize their skills and abilities
   - Sufficient income for people to be able to financially support themselves and their families
   - Safe communities and workplaces

2. Individual or human capacity can be maintained and enhanced through:
   - Opportunities to develop and upgrade skills
• A variety of local employment opportunities throughout the region
• Opportunities to develop and make use of creativity and artistic expression
• Appropriate, affordable formal and informal life-long learning
• Appropriate, affordable recreation, leisure and cultural facilities and programs
• A range of opportunities for individuals to contribute to the health and well-being of the community

3. **Social or community capacity** can be maintained and enhanced through:
• Support and encouragement for community economic development
• Community “identity” is reflective of community diversity
• Involvement in public processes and their results, and in government
• Opportunities and places for social interaction throughout the community
• Opportunities, resources and venues for a variety of arts, cultural and community activities
• Support and encouragement for community organizations and networks

3. **Guiding Principles of Social Sustainability**

There are four guiding principles that are referred to in the definition and direct socially sustainable work. They are described as follows:

1. **Equity** - when individuals have access to sufficient resources to participate fully in their community and have opportunities for personal development and advancement and there is a fair distribution of resources among communities to facilitate full participation and collaboration. Inequities can be minimized by recognizing that individuals and groups require differing levels of support in order to flourish, and that some individuals and groups are capable of contributing more than others to address disparities and promote fairness of distribution. Lower levels of disparity in societies result in longer life expectancies, less homicides and crime, stronger patterns of civic engagement and more robust economic vitality.

2. **Social inclusion and interaction** - both the right and the opportunity to participate in and enjoy all aspects of community life and interact with other community members; where the environment enables individuals to celebrate their diversity and react and act on their responsibilities. Social exclusion limits the levels of involvement and impedes optimal healthy development of individuals and the community as a whole.

3. **Security** - individuals and communities have economic security and have confidence that they live in safe, supportive and healthy environments. People need to feel safe and secure in order to contribute fully to their own well being or engage fully in community life.

4. **Adaptability** - resiliency for both individuals and communities and the ability to respond appropriately and creatively to change. Adaptability is a process of building upon what already exists, and learning from and building upon experiences from both within and outside the community.
APPENDIX 2:

Sustainable Communities Index (SCI) – List of Elements, Objectives & Indicators
En. Environment

- En.1. Decrease consumption of energy and natural resources
  
  **Primary Indicators**
  
  - En.1.a. Natural gas use
  - En.1.b. Electricity use
  - En.1.c. Water use
  - En.1.d. Solid waste disposal and diversion
  - En.1.e. Renewable energy production

- En.2. Restore, preserve and protect healthy natural habitats
  
  **Primary Indicators**
  
  - En.2.a. Shoreline accessibility
  - En.2.b. Open space
  - En.2.c. Total trees
  - En.2.d. Impervious ground surfaces

- En.3. Reduce residential and industrial conflicts
  
  **Primary Indicators**
  
  - En.3.a. Contaminated sites

- En.4. Preserve clean air quality
  
  **Primary Indicators**
  
  - En.4.a. Air quality

- En.5. Maintain safe levels of community noise
  
  **Primary Indicators**
  
  - En.5.a. Outdoor noise levels

T. Transportation

- T.1. Create a resource-efficient, equitable transportation system
  
  **Primary Indicators**
  
  - T.1.a. Motor vehicle access
  - T.1.b. Trips by non-auto mode
  - T.1.c. Time spent walking or biking
  - T.1.d. Transit commute time
  - T.1.e. Transit cost
  - T.1.f. Public Transit Score

- T.2. Ensure the safety of the transportation system
  
  **Primary Indicators**
  
  - T.2.a. Severe/fatal traffic injuries
  - T.2.b. Pedestrian Environmental Quality Index
  - T.2.c. Bike lanes and paths
  - T.2.d. Speed limit compliance
• T.3. Reduce adverse environmental health impacts of the transportation system
  
  **Primary Indicators**
  
  o T.3.a. Distance travelled in automobiles
  o T.3.b. Traffic density
  o T.3.c. Truck routes
  
C. Community

• C.1. Promote socially cohesive neighborhoods, free of crime and violence
  
  **Primary Indicators**
  
  o C.1.a. Violent crimes
  o C.1.b. Property crimes
  o C.1.c. Residential mobility
  o C.1.d. Community center access
  o C.1.e. Alcohol outlet density
  
  **Secondary Indicators**
  
  o C.1.f. Likelihood of leaving San Francisco
  o C.1.g. Neighborhood block parties
  o C.1.h. Spiritual and religious centers
  o C.1.i. Perceived safety
  
• C.2. Increase civic, social, and community engagement
  
  **Primary Indicators**
  
  o C.2.a. Voting rates
  
  **Secondary Indicators**
  
  o C.2.b. Volunteerism
  o C.2.c. Public meeting attendance

PR. Public Realm

• PR.1. Assure spaces for libraries, performing arts, theatre, museums, concerts, and festivals for personal and educational fulfillment
  
  **Primary Indicators**
  
  o PR.1.a. Art & cultural facilities
  o PR.1.b. Public funding for the arts
  o PR.1.c. Public library access
  o PR.1.d. Public art works
  
• PR.2. Assure affordable and high quality public health facilities
  
  **Primary Indicators**
  
  o PR.2.a. Public health facility transit access
  o PR.2.b. Hospital bed access
• PR.3. Increase park, open space and recreation facilities
  **Primary Indicators**
  o PR.3.a. Recreational Area Score
  o PR.3.b. Recreation facility access
  **Secondary Indicators**
  o PR.3.c. Community garden access

• PR.4. Increase accessibility, beauty, safety, and cleanliness of public spaces
  **Primary Indicators**
  o PR.4.a. Street tree population
  o PR.4.b. Streetscape improvements
  o PR.4.c. Streetscape maintenance

• PR.5. Assure access to daily goods and service needs
  **Primary Indicators**
  o PR.5.a. Public service access
  o PR.5.b. Retail service access
  o PR.5.c. Commercial zoning

• PR.6. Promote affordable and high-quality food access and sustainable agriculture
  **Primary Indicators**
  o PR.6.a. Food Market Score
  o PR.6.b. CalFresh benefits acceptance
  o PR.6.c. Farmers’ market access

**Ed. Education**

• Ed.1. Assure affordable and high quality child care for all neighborhoods
  **Primary Indicators**
  o Ed.1.a. Child care capacity
  o Ed.1.b. Child care subsidies
  o Ed.1.c. Child care costs

• Ed.2. Assure accessible and high quality educational facilities
  **Primary Indicators**
  o Ed.2.a. Elementary School Score
  o Ed.2.b. School choice
  o Ed.2.c. School academic performance
  **Secondary Indicators**
  o Ed.2.d. School gardens
  o Ed.2.e. School graduation rates
  o Ed.2.f. Public school participation
H. Housing

- **H.1. Preserve and construct housing in proportion to demand with regards to size, affordability, and tenure**
  
  **Primary Indicators**
  - **H.1.a. Housing production and affordability**
  - **H.1.b. Excessive rent burden**
  - **H.1.c. Housing purchasing capacity**
  - **H.1.d. Home ownership**
  
  **Secondary Indicators**
  - **H.1.e. Overcrowding**
  - **H.1.f. Housing wage & minimum wage**
  - **H.1.g. Residential density**

- **H.2. Protect residents from involuntary displacement**
  
  **Primary Indicators**
  - **H.2.a. Fair market rate rent trends**
  - **H.2.b. No-fault evictions**
  
  **Secondary Indicators**
  - **H.2.c. Affordable rental housing stock**

- **H.3. Decrease concentrated poverty**
  
  **Primary Indicators**
  - **H.3.a. Ethnic diversity**
  - **H.3.b. Low-income households**

- **H.4. Assure access to healthy quality housing**
  
  **Primary Indicators**
  - **H.4.a. Housing health & safety violations**

Ec. Economy

- **Ec.1. Increase high-quality employment opportunities for local residents**
  
  **Primary Indicators**
  - **Ec.1.a. Jobs paying at least self-sufficiency wage**
  - **Ec.1.b. Worker residents**
  - **Ec.1.c. Job density**
  
  **Secondary Indicators**
  - **Ec.1.d. Job openings and educational requirements**

- **Ec.2. Increase jobs that provide healthy, safe and meaningful work**
  
  **Primary Indicators**
  - **Ec.2.a. Health insurance coverage**
  - **Ec.2.b. Occupational non-fatal injury rates**
  
  **Secondary Indicators**
  - **Ec.2.c. Paid sick days**
• Ec.3. Increase equality in income and wealth
  
  **Primary Indicators**
  - Ec.3.a. Income inequality
  - Ec.3.b. Employment
  - Ec.3.c. Bank or credit union access
  
  **Secondary Indicators**
  - Ec.3.d. Minority and women owned businesses

• Ec.4. Protects and enhances natural resources and the environment
  
  **Primary Indicators**
  - Ec.4.a. Green businesses

D. Demographic

- D.1. Population density
- D.2. Ethnicity
- D.3. Per capita and household income
- D.4. Low-income households
- D.5. Household size
- D.6. Employment rate
- D.7. Residential mobility
- D.8. Educational attainment
- D.9. Nativity
- D.10. Marital status
- D.11. Youth and seniors
- D.12. Households with children
- D.13. Home sales
- D.14. Cost of living
- D.15. Homeless population

HO. Health Outcomes

- HO.2. Early prenatal care
APPENDIX 3:

SCI Healthy Development Checklist (Version 4.03)
<table>
<thead>
<tr>
<th>#</th>
<th>Environment Criteria</th>
<th>Applicable Project Type (yes / no)</th>
<th>Target Achieved? (Yes/No/??)</th>
<th>Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective En.1 Decrease consumption of energy and natural resources</strong></td>
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<tr>
<td>En.1.a</td>
<td>If the project is a residential project (5+ units), does the project meet LEED Silver or an equivalent third-party certification standard OR If the project is a commercial or institutional project, does the project meet LEED Gold or an equivalent third-party certification standard?</td>
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<tr>
<td>En.1.b</td>
<td>Does the project meet the standard of the San Francisco Green Building Regulations as specified in the 2010 San Francisco Building Code 13C?</td>
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<tr>
<td>En.1.c</td>
<td>If the project is a residential project, does the project exceed California Title 24 2008 energy efficiency standards by 15%? OR If the project is a commercial project, does the project exceed California Title 24 2008 energy efficiency standards or generate 2% of energy on-site?</td>
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<tr>
<td><strong>Objective En.2 Restore, preserve and protect healthy natural habitats</strong></td>
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<tr>
<td>En.2.a</td>
<td>Is the project located at a distance greater than 100 feet from existing shorelines of water bodies--seas, lakes, rivers, streams and tributaries--and wetlands?</td>
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<tr>
<td>En.2.b</td>
<td>If the project develops or alters land deemed to be significant natural resource areas, does the project preserve or restore 20% of the development parcel area to a natural condition with regard to flora?</td>
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<tr>
<td>En.2.c</td>
<td>If a land use plan, does the plan area include 10 acres of publically accessible open space per 1,000 residents OR does the plan include provisions to achieve that amount of open space?</td>
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<td>En.2.d</td>
<td>Does the project provide a continuous row of appropriately spaced trees at all streets adjacent to the project?</td>
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<td>En.2.e</td>
<td>Does the project use porous pavement materials on drives, sidewalks, parking lots and plazas? AND apply the “SFPUC Storm water Design Guidelines”?</td>
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<td>En.2.f</td>
<td>For all projects, does building design for the project avoid causing ground level wind currents greater than 7 mph in public open space and plazas?</td>
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<td>En.2.g</td>
<td>For all projects, does building design for the project avoid new shadows on public open space and plazas?</td>
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<td>En.2.h</td>
<td>Does the project use roofing materials having a Solar Reflectance Index (SRI) equal to or greater than 78 on a low-sloped roof or 29 on a steep-sloped roof for a minimum of 75% of the roof surface OR I install a vegetated roof for at least 50% of the roof area OR I install high albedo and vegetated roof surfaces that, in combination, meet the following criteria that meet SS Credit 7.2: Heat Island Effect: Roof?</td>
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<td><strong>Objective En.3 Mitigate industrial contamination</strong></td>
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<tr>
<td>En.3.a</td>
<td>Does the project remediate environmental contamination at an environmentally compromised and underutilized development site (e.g. a Brownfield site).</td>
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<tr>
<td>#</td>
<td>Environment Criteria</td>
<td>Applicable Project Type (yes / no)</td>
<td>Target Achieved? (Yes/No/??)</td>
<td>Information Source</td>
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<td><strong>Objective En.4 Prevent exposoure to harmful levels of air pollution</strong></td>
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<td></td>
<td>En.4.a If the project is residential, school, or child-care, does the project avoid</td>
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<td>locating a sensitive uses in a location where the annual average fine particulate</td>
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<td>level is greater than 10 ug /m3, where the annual average nitrogen dioxide level is</td>
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<td>greater than 30 ppb or where the peak hourly nitrogen dioxide level is greater than</td>
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<td>100 ppb and where carbon monoxide levels are greater than 8 ppm for eight hours or</td>
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<td>12 ppm for one hour?</td>
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<td>En.4.b Does the project avoid contributing net air pollution emissions to areas</td>
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<td>where the annual average fine particulate level is greater than 10 ug /m3, where the</td>
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<td>annual average nitrogen dioxide level is greater than 30 ppb or where the peak</td>
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<td>hourly nitrogen dioxide level is greater than 100 ppb and where carbon monoxide</td>
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<td>levels are greater than 8 ppm for eight hours or 12 ppm for one hour?</td>
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<td></td>
<td>En.4.c Does the project avoid locating new sensitive uses, including schools, park</td>
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<td>and playgrounds, day care centers, nursing homes, hospitals, and residence in close</td>
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<td>proximity to a major industrial stationary source of air pollution as defined by the</td>
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<td>CARB Air Quality Land Use Handbook?</td>
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<td><strong>Objective En.5 Prevent noise exposure and the degradation of the noise environment</strong></td>
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<td></td>
<td>En.5.a Does the project avoid locating in a location with ambient noise levels &gt;60</td>
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<td>dBA Ldn?</td>
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<td></td>
<td>En.5.b Does the project avoid contributing net new noise emissions in a location</td>
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<td>with ambient noise levels &gt;60 dBA Ldn?</td>
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<td>En.5.c Do plans for the project demonstrate compliance with both interior and</td>
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<td>exterior noise standards San Francisco Police Code Section 2909 (a-d), California</td>
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<td>Title 24 Section 1207 and California Green Building Regulations Title 24 Part 11?</td>
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<td>#</td>
<td>Transportation Criteria</td>
<td>Applicable Project Type (yes/no)</td>
<td>Target Achieved? (Yes/No/??)</td>
<td>Information Source</td>
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<tr>
<td><strong>Objective T.1 Create a resource-efficient, equitable transportation system</strong></td>
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<tr>
<td><strong>T.1.a</strong></td>
<td>If the project is either a residential, commercial and/or institutional project, does the project provide at least 4 of the following transportation demand management strategies?</td>
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<td></td>
<td>§ Carpool matching programs</td>
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<td>§ Car sharing services/parking spots</td>
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<td>§ Dedicated employee or resident transportation coordinator</td>
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<td>§ Financial incentives for walkers and bicyclists</td>
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<td>§ Free or reduced cost transit passes</td>
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<td>§ Guaranteed ride home program</td>
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<td>§ Preferential carpool/vanpool parking</td>
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<td>§ Provision of bus schedules, bike maps, other transportation alternative resources</td>
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<td>§ Secure bike parking</td>
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<td>§ Showers/changing facilities for employees</td>
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<td>§ Shuttle service (in areas not well-served by public transit)</td>
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<td></td>
<td>§ Telecommuting</td>
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<td>§ Another transportation demand management strategy</td>
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<td><strong>T.1.b</strong></td>
<td>If the project is either a residential, commercial and/or institutional project, is the project within 1/2 mile of regional transit station (e.g., BART, Cal Train) OR does the project include dedicated shuttle trips to regional transit, with timing and frequency based on estimates of area demand? AND is the project within 1/4 mile of a local transit stop?</td>
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<td><strong>T.1.c</strong></td>
<td>If the project is either a residential, commercial, and/or institutional project, is the project within 1/4 mile of a major public transit street (with boardings/alightings exceeding 12,000/day)?</td>
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<td><strong>T.1.d</strong></td>
<td>If a transportation element of a land use plan, does it provide adequate light, shelter and space to sit at all bus stops, with enhanced amenities at key stops?</td>
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<td><strong>T.1.e</strong></td>
<td>If the project is either a residential, commercial and/or institutional project within immediate sightline/walking distance of a surface transit stop, does the project provide sheltered, well-lit, publicly displayed real-time bus arrival information at regular intervals (e.g., Next-Bus) and/or stay open to the public for extended hours (e.g., cafes, bookstores, bars, institutional building lobbies)?</td>
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<td>#</td>
<td>Transportation Criteria</td>
<td>Applicable Project Type (yes / no)</td>
<td>Target Achieved? (Yes/No/??)</td>
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<td>T.1.f</td>
<td>If the project is either a residential, commercial, and/or institutional project, does the project subsidize discounted public transit passes for households with incomes ≤200% of the Federal poverty level (e.g., if transit passes are included in homeowners associations fees, they are provided at a reduced cost)? OR Is the project within ½ mile of a location selling Muni Lifeline Fast Passes (discounted MUNI monthly fast passes for San Francisco Residents with incomes at or below 200% of the Federal poverty level)?</td>
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<td>T.2.a</td>
<td>If a transportation element of a land use plan, does it include bicycle lanes and/or paths linked to the city’s existing bicycle network? AND Does it incorporate at least 3 interventions from the following list? § Bicycle lanes at least 5 feet wide § Bicycle lane signs § Dashed intersection bicycle lanes § Double-striped bicycle lanes (striped on each side) § Driveway cuts are prohibited or kept to a minimum of 4 or fewer per street segment § Left-turn bicycle lanes § Shared traffic lanes with sharrows (or painted bike marking on pavement) § Smooth roadway pavement surfaces § Street lighting (adequate for bicyclists) § Street trees (traffic calming, improve bicycle environment)</td>
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<tr>
<td>T.2.b</td>
<td>If a residential, commercial, and/or institutional project, is the project within 4 blocks of bicycle lanes and/or paths linked to the city’s existing bicycle network? AND Does it incorporate at least 1 intervention from the following list? § Driveway cuts are prohibited or kept to a minimum of 4 or fewer per street segment § Street lighting (adequate for bicyclists) § Street trees (traffic calming, improve bicycle environment)</td>
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<td>T.2.c</td>
<td>If a transportation element of a land use plan, does it incorporate at least 6 pedestrian environmental quality improvements from the following list? OR Does the project maintain or achieve a one grade level improvement in the Pedestrian Environmental Quality Index score (in the acceptable range)? § Pedestrian-oriented building access § Pedestrian scale design on building frontages</td>
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<td>Transportation Criteria</td>
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<td>§ Pedestrian scale lighting on private buildings and/or on public streets</td>
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<td>§ Pedestrian specific building entrances</td>
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<td></td>
<td>§ Public art in streetscape</td>
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<td>§ Public seating in streetscape</td>
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<td></td>
<td>§ Restaurants, retail uses and historical sites located in/near plan area, approximately one destination per block</td>
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<td>§ Legible and safe routes to schools or other key pedestrian destinations specifically designed, including routes to senior facilities, health care, grocery stores, and public transit stops/stations</td>
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<td>§ Sidewalk ramps ramps for pedestrians at intersections and other pedestrian street crossings</td>
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<td></td>
<td>§ Sidewalks free of impediments (so that people may walk and push baby strollers, etc. safely)</td>
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<td>§ Sidewalks that are at least 5 feet wide and at least 8 feet wide when there is not a sidewalk buffer along arterial streets</td>
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<td>§ Sidewalks with a continuous curb with appropriately placed curb ramps for people with disabilities (an exception being pedestrian-oriented, Woonerf streets)</td>
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<td></td>
<td>§ Street trees, planters, and gardens included in streetscape</td>
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<td></td>
<td>§ Street cleaning addressed in plans - including trash can locations, graffiti removal where applicable</td>
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<td>§ Signage for pedestrians, specific to the neighborhood/street - potentially including area maps</td>
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<td>T.2.d</td>
<td>If a residential, commercial and/or institutional project, does it incorporate at least 5 pedestrian environmental quality improvements if in an area without existing street/sidewalk infrastructure, OR at least 3 pedestrian environmental quality improvements if in an area without existing street/sidewalk infrastructure, from the following list?</td>
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<td>§ Pedestrian-oriented building access</td>
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<td>§ Pedestrian scale design on building frontages</td>
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<td>§ Pedestrian scale lighting on private buildings and/or on public streets</td>
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<td>§ Public art in streetscape</td>
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<td>§ Public seating in streetscape</td>
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<td>§ Sidewalk curb ramps for pedestrians at intersections and other pedestrian street crossings</td>
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<td>§ Sidewalks free of impediments (so that people may walk and push baby strollers, etc. safely)</td>
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<td>§ Sidewalks that are at least 5 feet wide and at least 8 feet wide when there is not a</td>
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<td></td>
<td>sidewalk buffer along arterial streets</td>
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<td>§ Sidewalks with a continuous curb with appropriately placed curb ramps for people</td>
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<td>with disabilities (an exception being pedestrian-oriented, Woonerf streets)</td>
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<td>§ Street trees, planters, and gardens included in streetscape</td>
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<td>§ Street cleaning addressed in project - including trash can locations, graffiti</td>
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<td>T.2.e</td>
<td>If the project is a commercial, residential, institutional or industrial project</td>
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<td>located within 500 feet of a high-injury corridor, does it construct or financially</td>
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<td>contribute to pedestrian safety countermeasures from the list below.</td>
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<td>T.2.f</td>
<td>If a transportation element of a land use plan, does it include at least 8 of the</td>
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<td>following pedestrian safety countermeasures targeted to high-injury intersections,</td>
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<td>corridors and/or areas?</td>
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<td></td>
<td>§ Accessible Pedestrian Signals</td>
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<td>§ Advance limit/yield lines at marked crosswalks</td>
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<td>§ Bollards (short vertical posts)</td>
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<td>§ Corner bulb-outs</td>
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<td>§ Crosswalks that are signalized and marked (preferably with a pedestrian</td>
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<td>countdown signal - especially when more than 2 lanes of traffic)</td>
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<td>§ Driveway cuts are prohibited or kept to a minimum of 4 or fewer per street segment</td>
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<td>§ Channelization islands (raised island that forces traffic in a particular direction,</td>
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<td>such as right-turn-only)</td>
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<td>§ Chicanes (curb bulges or planters on alternating sides, forcing motorists to slow</td>
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<td>down)</td>
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<td>§ Chokers (raised islands in a parking zone that narrow a roadway)</td>
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<td>§ Curb extensions, planters, or centerline traffic islands that narrow traffic</td>
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<td>lanes</td>
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<td></td>
<td>§ Curb ramps</td>
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<td>§ Flashing beacons</td>
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<td>§ Gateway treatments</td>
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<td>§ High-Intensity Activated Crosswalk (HAWK) Signals</td>
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<td>§ Horizontal shifts (a lane centerline that curves or shifts)</td>
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<td>§ Leading pedestrian intervals</td>
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<td>§ Lighting to increase pedestrian visibility</td>
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<td>§ Median islands (raised island in the road center) or pedestrian refuge islands</td>
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<td>Transportation Criteria</td>
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<td>§ Parking restrictions for on-street parking such as residential permit parking and at least ten feet in advance of the crosswalks to improve visibility where there are crosswalks without curb extensions § Pavement treatments - special pavement textures (e.g. bricks) and markings, coloring or messages (e.g., &quot;LOOK&quot;) to designate areas for pedestrians or cyclists § Pedestrian countdown signals § Pedestrian detection to extend pedestrian crossing time § Pedestrian scrambles § Pedestrian warning signs § Perceptual design features (e.g. patterns painted into road surfaces that encourage drivers to reduce their speeds) § Protected left turns § Raised crosswalks and intersections § Reductions in the number and width of traffic lanes (particularly on arterials) § Roundabouts (medium to large circles at intersections) § Rumble or warning strips § Semi-diverters, partial closures (restricts entry/exit to/from neighborhood and limits traffic flow at intersections) § Signal timing to reduce traffic speeds § Speed humps § Automated speed limit enforcement § Speed limits below 20 mph § Speed radar display signs § Speed tables § Street closures (closing off streets to through vehicle traffic at intersections or midblock) § Street trees (create a sense of enclosure and improve the pedestrian environment) § Tighter corner radii (a tighter radius forces drivers to reduce speed) § Traffic circles § Truck restrictions (particularly in residential areas or near pedestrian-oriented uses) § Turn restrictions (to keep traffic on main traffic streets) or prohibitions § Wooners (&quot;shared streets&quot; with mixed vehicle and pedestrian traffic, where motorists are required to drive at very low speeds)</td>
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<td><strong>Objective T.3 Reduce adverse environmental health impacts of the transportation system</strong></td>
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<td>T.3.a</td>
<td>If the project is either a residential, commercial and/or institutional project OR a transportation element of a land use plan, does it provide structured residential parking at a ratio less than or equal to one space for every two households for projects &lt;1/2 mile from regional mass transit stops including rail, ferry, or bus service OR a ratio less than or equal to three spaces for every four households for the rest of the city?</td>
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<td>T.3.b</td>
<td>If the project is either a residential, commercial and/or institutional project OR a transportation element of a land use plan, does it address parking through at least 1 of the following pricing strategies?  § On-street parking priced for a target utilization rate of 85%  § Variable rate parking pricing (e.g. it costs more per hour the longer you park)  § Coordinated off-street and on-street parking pricing (to increase utilization of off-street parking)  § Unbundled parking (charging for parking costs separate from residential/commercial property/rental costs, making parking costs transparent/optional instead of a hidden cost)  Does the project meet or achieve a standard of 10 acres of publicly accessible open space per 1,000 population in the planning area?</td>
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<td>T.3.c</td>
<td>Does commercial or institutional development greater than 50,000 sq. ft. provide adequate on-site or designated on-street truck parking?</td>
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### Community Criteria

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<th>Community Criteria</th>
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<th>Target Achieved? (Yes/No/??)</th>
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</table>

**Relationship to Other Elements**

See related public realm criteria for design of public outdoor spaces, parks, recreational centers, community facilities, public schools, libraries, and cultural venues. See transportation criteria for pedestrian environments and pedestrian safety. See housing criteria for inclusionary and affordable housing. See economy criteria for local hiring and job development training.

**Objective C.1 Promote socially cohesive neighborhoods, free of crime and violence**

| C.1.a | If a residential project, is the project within 1/2 mile of a public facility for community events and functions? | | | |
| C.1.b | If the project is a commercial use and in an area with a high density of off-sale alcohol outlets, does it disallow future off-sale alcohol outlets? | | | |

**Objective C.2 Increase participation in social decision-making processes**

| C.2.a | If the project is either a residential, commercial, institutional or industrial project, does the project include a community benefits agreement or a community-directed impact fee through which the existing community will receive financial or infrastructure benefits from new development? (See Public Realm criteria) | | | |
| C.2.b | If the project is either a residential, commercial, or institutional project over 10,000 square feet, does the project develop a publicly accessible meeting room that may be used for meetings, events, public service, or social functions? | | | |

**Objective C.3 Assure equitable and democratic participation throughout the planning process**

| C.3.a | Did planning for the project include a community oversight or advisory process with representative community involvement? | | | |

*Minimum criteria for meaningful community participation in such a process would include:* Representative participation from project area residents and business owners; accessibility to low literacy and non-English language populations impacted by the project; disability access, transparent and complete information about the project design, and opportunities to influence project design. Providing childcare, food, transportation for participants may also support resident participation.
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<tr>
<th>#</th>
<th>Public Realm Criteria</th>
<th>Applicable Project Type (yes/no)</th>
<th>Target Achieved (Yes/ No/ ??)</th>
<th>Information Source</th>
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<td></td>
<td><strong>Applicable to all Public Infrastructure Objectives</strong></td>
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<td>PR.0.a</td>
<td>If the project is either a residential, commercial, or institutional project, does the project include a negotiated community benefits agreement or a community directed development impact fee to support the construction, maintenance, or programming at one or more of the following types of public infrastructure: § Child care and/or public educational facilities § Community meeting, multi-use and/or public recreational facilities § Public park, public plaza, and/or community garden § Library § Health care facility Does the project meet or achieve a standard of 10 acres of publicly accessible open space per 1,000 population in the planning area?</td>
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<td><strong>Objective PR.1 Assure spaces for libraries, performing arts, theatre, museums, concerts, and festivals for personal and educational fulfillment</strong></td>
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<td>PR.1.a</td>
<td>If the project is residential, is the project within 1/2 mile of public art or an art/cultural facility?</td>
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<td>PR.1.b</td>
<td>If the project is residential, is the project located within 1 mile of a public library?</td>
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<td>PR.1.c</td>
<td>If project is a new art/cultural facility, is it sited within 1/2 mile of existing or proposed regional transit stop?</td>
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<td>PR.1.d</td>
<td>If project is a new art/cultural facility, does it provide a discounted admission prices for children, seniors, and students less than or equal to $10 or does it holds a free general admission day at least once a month?</td>
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<td>PR.1.e</td>
<td>Does the project include or preserve murals, public art, or space for public performances?</td>
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<td>PR.1.f</td>
<td>If the project is a public infrastructure or institutional project, does it set aside 2% of total construction costs to the creation of public art?</td>
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<td>PR.1.g</td>
<td>If the project is new commercial use larger than 50,000 square feet, will it use local artists, artisans, or fabricators to create at least 3 of the following to incorporate culturally appropriate, functional art and/or architectural opportunities for the display of artwork: § artistically designed, energy efficient, pedestrian-scale lighting § kiosk or community bulletin board to publicize arts/community events § artistically designed parks and playgrounds § mini public spaces or niches for art displays or performances § stairs § benches § bike racks § designated graffiti walls § tree grates/wards § grills on windows, garage, and/or front door</td>
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<td>#</td>
<td>Public Realm Criteria</td>
<td>Applicable Project Type (yes/no)</td>
<td>Target Achieved (Yes/ No/ ??)</td>
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<td></td>
<td>§ sculptured sidewalks or sidewalk tiles (with removable, slip resistant squares that are decorated with patterns/tiles but can be moved and replaced when PUC needs underground access)</td>
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<tr>
<td>Objective PR.2</td>
<td><strong>Assure accessible high quality health care facilities</strong></td>
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<tr>
<td>PR.2.a</td>
<td>If the project is either a hospital or major clinical care facility project, is the project within 1/4 mile of a major public transit street (with boardings/alightings exceeding 12,000/day)?</td>
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<tr>
<td>Objective PR.3</td>
<td><strong>Increase park, open space and recreation facilities</strong></td>
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<tr>
<td>PR.3.a</td>
<td>If the project is a residential project, is the project either within 1/2 mile of a neighborhood park of at least 1 acre or within 1 mile of a regional park?</td>
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<tr>
<td>PR.3.b</td>
<td>If the project is a residential project, is the project within 1/2 mile of a publicly accessible community recreational facility (e.g. swimming pool, gym, etc.)?</td>
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<tr>
<td>PR.3.c</td>
<td>If the project is either a residential or commercial project, does the project contribute to local park, public space, or recreational facility acquisition funds at a rate of $1/square foot?</td>
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<tr>
<td>PR.3.d</td>
<td>If the project is either a residential or commercial project, does the project include publically accessible open space equal to one square foot per 50 square feet of private finished space?</td>
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<tr>
<td>PR.3.e</td>
<td>Does the project include a publicly accessible community garden?</td>
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<tr>
<td>Objective PR.4</td>
<td><strong>Increase accessibility, beauty, safety, and cleanliness of public spaces</strong></td>
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<tr>
<td>PR.4.a</td>
<td>If the project is a commercial project, does the project contribute to a community benefits district for maintenance or programming of public facilities?</td>
<td></td>
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<tr>
<td>PR.4.b</td>
<td>If the project is either a residential or commercial project, does the project provide lighting fixtures on streetscapes within or adjacent to the project at current city standards for adequacy of sidewalk and street lighting?</td>
<td></td>
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<tr>
<td>PR.4.c</td>
<td>If a commercial project over 25,000 sq. ft. in a commercial business district, does the project include public toilets?</td>
<td></td>
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<tr>
<td>PR.4.d</td>
<td>If the project is either a residential or commercial project, does it improve the adjacent pedestrian right of ways to the design standards in the Better Streets Plan Streetscapes Elements Guide?</td>
<td></td>
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<tr>
<td>Objective PR.5</td>
<td><strong>Assure access to goods and services</strong></td>
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<tr>
<td>PR.5.a</td>
<td>If the project is a residential project, is the project within 1/2 mile of an area that has 8 out of 11 common public services that contribute to neighborhood completeness?</td>
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<tr>
<td>PR.5.b</td>
<td>If the project is a residential project, is the project within 1/2 mile of an area that has 9 out of 12 common retail services that contribute to neighborhood completeness?</td>
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<tr>
<td>#</td>
<td>Public Realm Criteria</td>
<td>Applicable Project Type (yes / no)</td>
<td>Target Achieved (Yes/ No/ ??)</td>
<td>Information Source</td>
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<tr>
<td>6</td>
<td>Objective PR.6  Promote affordable and high-quality food access and sustainable agriculture</td>
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<tr>
<td>PR.6.a</td>
<td>If the project is residential, is the project located within 1/2 mile of a full service supermarket?</td>
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<tr>
<td>PR.6.b</td>
<td>If the project is residential, is the project within 1/2 mile of a weekly farmer's market?</td>
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<tr>
<td>PR.6.c</td>
<td>If a commercial or institutional project over 25,000 sq. ft., and is not within 1/2 mile of a full service supermarket, does it contribute to a new “healthy food supply”?</td>
<td></td>
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<tr>
<td>PR.6.d</td>
<td>If the project is a food establishment, does it accept EBT, participate as a provider in a Federal food assistance program, or make weekly charitable food donations.</td>
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<tr>
<td>#</td>
<td>Education Criteria</td>
<td>Applicable Project Type (yes/no)</td>
<td>Target Achieved (Yes/ No/ ??)</td>
<td>Information Source</td>
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<tr>
<td><strong>Objective Ed.1</strong> <strong>Assure affordable and high quality childcare for all neighborhoods</strong></td>
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</tbody>
</table>
| Ed.1.a | If the project is a commercial project over 50,000 square feet, does it do one of the following:  
§ include a child care facility on-site  
§ provides subsidized rent for a child care facility on-site  
§ subsidize or support a non-profit to provide child care in an nearby facility  
§ pay $1 per square foot of commercial or residential space developed into the Child Care Capital Fund8 (managed by DCYF)? | | | |
<p>| Ed.1.b | If project is or includes a childcare facility, will 10% of the maximum capacity of childcare facility be affordable to children of low-income households? | | | |
| Ed.1.c | If the project includes or is a child care facility, does it comply with Title 22 &amp; Title 5 Regulations and Head Start Design Guidelines, and include at least 50% of the recommended best practices in childcare environmental design identified by Bridge Housing Child Care Handbook (pp.132-153)? | | | |
| <strong>Objective Ed.2</strong> <strong>Assure accessible and high quality educational facilities</strong> | | | | |
| Ed.2.a | If the project includes residential uses, is the project within 1/2 mile of a public elementary school? | | | |
| Ed.2.b | If the project includes residential uses, is the project within a 30 minute commute of a public middle and high school? | | | |
| Ed.2.c | If the project is a new, remodeled, or expanded school facility, does it achieve at least “Designated” status from the Collaborative for High Performance Schools? | | | |</p>
<table>
<thead>
<tr>
<th>#</th>
<th>Housing Criteria</th>
<th>Applicable Project Type (yes/no)</th>
<th>Target Achieved? (Yes/No/??)</th>
<th>Information Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Objective H.1  Preserve and construct housing in proportion to demand with regards to size, affordability, and tenure</strong></td>
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<tr>
<td></td>
<td>H.1.a If the project is residential, does the project set aside 20% of units (onsite) for affordable housing to contribute to affordable housing need?</td>
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<td></td>
<td>H.1.b If the project is residential, does the project distribute unit size with at least 25% of units being 2-bedrooms and with at least 25% of units being 3-bedrooms?</td>
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<td></td>
<td>H.1.c If the project is residential, does the project provide rental housing? For community plans, does the plan include a mix of rental and ownership housing within 15% of the current distribution of rental and ownership housing (currently 65% rent and 35% own). In other words, range between 50%-80% rental and 20%-50% owner?</td>
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<td></td>
<td>H.1.d If the project is residential, is the project designed with a residential density at or above 25 dwelling units per residential acre (or at or above 40 dwelling units per residential acre for projects &lt;1/2 mile from regional mass transit stops including rail, ferry, or bus service)? (note: 1 acre = 4840 Square Yards = 43560 Square Feet = 220 ft. x 198 ft.)</td>
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<td><strong>Objective H.2  Protect residents from involuntary displacement</strong></td>
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<td>H.2.a For any project type, if the project results in the demolition or loss of deed restricted, public, inclusionary, or rent-controlled housing, does the project replace the demolished/lost housing stock at a 1:1 ratio and provide access to replacement housing for existing tenants at existing rents?</td>
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<td><strong>Objective H.3  Prevent concentrated poverty</strong></td>
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<td></td>
<td>Actionable criteria under healthy economy objectives and objectives H.1 and H.2 above.</td>
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<td><strong>Objective H.4  Assure healthy, high-quality housing</strong></td>
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<td></td>
<td>H.4.a If the project is residential, does the project design include the following building construction and design measures:</td>
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<td></td>
<td>1) Ventilation: If the project is residential, project less than 5 units does the project provide mechanical ventilation consistent with ASHRAE 62.6. OR If the project is commercial, institutional or high rise residential does the project provide mechanical ventilation consistent with ASHRAE/IESNA Standard 90.1-2004</td>
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<tr>
<td>#</td>
<td>Housing Criteria</td>
<td>Applicable Project Type (yes/no)</td>
<td>Target Achieved? (Yes/No/??)</td>
<td>Information Source</td>
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<td>2</td>
<td>2) Indoor Environmental Quality (IEQ): Does the project achieve the following EQ LEED credits or an equivalent third-party certification standard: LEED Credit 3.1 Construction IAQ Management Plan, During Construction LEED Credit 3.2 Construction IAQ Management Plan, Before Occupancy LEED Credit 4.1 Low-Emitting Materials, Adhesives &amp; Sealants LEED Credit 4.2 Low-Emitting Materials, Paints &amp; Coatings LEED Credit 4.3 Low-Emitting Materials, Carpet Systems LEED Credit 4.4 Low-Emitting Materials, Composite Wood &amp; Agrifiber Products LEED Credit 5 Indoor Chemical &amp; Pollutant Source Control</td>
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<td>3</td>
<td>3) Design for Active Living: Achieves 17 out of 24 points on the New York City &quot;Design for Health through Increased Physical Activity&quot; checklist</td>
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<tr>
<td>#</td>
<td>Economy Criteria</td>
<td>Applicable Project Type (yes/no)</td>
<td>Target Achieved? (Yes/No/??)</td>
<td>Information Source</td>
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<tr>
<td><strong>Objective Ec.1 Increase high-quality employment opportunities for local residents</strong></td>
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<tr>
<td>Ec.1.a</td>
<td>If the project is residential, commercial, industrial, or institutional (all project types), do all long term jobs created by the project provide entry level wages greater than or equal to the regional self-sufficiency standard for an individual?</td>
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<tr>
<td>Ec.1.b</td>
<td>If the project is commercial, industrial, or institutional over 25,000 square feet, does the project support local housing for its employees through either a jobs-housing linkage fee requirement; by providing location-efficient mortgage support for employees; or by building employee housing?</td>
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<tr>
<td>Ec.1.c</td>
<td>If the project is commercial, industrial, or institutional, will long term jobs created by the project include entry level work opportunities for individuals with a GED/high school diploma?</td>
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<tr>
<td><strong>Objective Ec.2 Increase jobs that provide healthy, safe and meaningful work</strong></td>
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<td>Ec.2.a</td>
<td>If the project is either a residential, commercial, or institutional project over 25,000 square feet, does the project include a negotiated community benefits agreement to support fair labor practices that includes two or more of the following for all short- and long-term employees: § Paid sick leave § Paid vacation or paid time off § Employer-provided health insurance and/or contributions to health care savings/expense account § Retirement benefits § Training on health and safety from OSHA-certified trainers</td>
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<tr>
<td>Ec.2.b</td>
<td>If the project is commercial, industrial, or institutional and will employ more than 50 people in long term jobs, does the project include a private, non-bathroom space used to support employee lactation?</td>
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<td><strong>Objective Ec.3 Increase equality in income and wealth</strong></td>
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<tr>
<td>Ec.3.a</td>
<td>If the project is a public works or public infrastructure project, does the project employ local residents for 25% of construction jobs?</td>
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<tr>
<td>Ec.3.b</td>
<td>If the project is commercial, industrial, or institutional, does the project include a workforce development component or partnership?</td>
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<tr>
<td><strong>Objective Ec.4 Benefits and protects natural resources and the environment</strong></td>
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<tr>
<td>Ec.4.a</td>
<td>If the project is commercial, industrial, or institutional, does the project serve locally owned businesses (e.g. the project will be occupied by a locally-owned business or expand the market for locally owned business services)?</td>
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APPENDIX 4:

PHILATool (The Planning & Health Indicator List & Assessment Tool)
PHILATool
(The Planning & Health Indicator List & Assessment Tool)

PHILATool is a product of Get Healthy Philly, an initiative of the Philadelphia Department of Public Health (PDPH). Get Healthy Philly is made possible through funding from the Department of Health and Human Services as part of Communities Putting Prevention to Work (CPPW).

PHILATool (“The Tool”) was developed in conjunction with the City Planning Commission (PCPC) during the drafting of Philadelphia2035, the City of Philadelphia’s new Comprehensive Plan (“The Plan”). The Tool matches 20 of The Plan’s objectives to a series of 71 measurable indicators used to measure progress towards each objective. The Tool also incorporates demographic data from the US Census and local data on health outcomes to assist planners, decision-makers, and the general public in understanding the connections between the built environment and public health. The data will support Health Impact Assessments (HIAs) as needed. Until an online version of The Tool is available, analysis will be posted on www.philadelphia2035.com.

Each of the indicators will be graphed, mapped, or otherwise analyzed throughout the Philadelphia2035 process to provide data necessary to consider public health in the context of land use, zoning, infrastructure, and development decision-making.

The Tool is adapted from the Healthy Development Measurement Tool (HDMT), created by the San Francisco Department of Public Health’s Program on Health, Equity, and Sustainability.
<table>
<thead>
<tr>
<th>Citywide Plan Objective</th>
<th>Indicators</th>
<th>Agencies (data source)</th>
<th>Health-based Rationale (why this is a community health objective)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 Strengthen neighborhod centers by clustering community-serving capital facilities</td>
<td>1. Proportion of community-serving capital facilities located within neighborhood centers as identified and defined in Philadelphia2035 2. Proportion of community-serving capital facilities within 1/4 mile of one another 3. Proportion of households within 1/2 mile of community-serving capital facility or facility cluster</td>
<td>PCPC, PCPC, PPCPC, Parks &amp; Rec, School District</td>
<td>Clustering public services within close proximity to one another and to residential populations decreases reliance on automobiles, which reduces emissions and encourages walking as part of daily routines. Walkable communities increase opportunities for social interaction and increase street surveillance.</td>
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<tr>
<td>1.1.2 Strengthen neighborhood centers by developing viable commercial corridors</td>
<td>4. Number of Special Services Districts and Business Improvement Districts (BID) 5. Number of retail births within commercial corridor 6. Pedestrian/auto volumes along stable or growing corridors corridors 7. Number of parcels (and/or total square footage) rezoned (upzoning in commercial core/downzoning to residential and other uses in less viable sections) OR ratio of # parcels zoned commercial to vacant commercial parcels</td>
<td>Commerce, Commerce, PennDOT, MOTU, PCPC</td>
<td>Living in a mixed-use community with a variety of shops and services is a negative predictor of obesity in urban areas. Increasing non-automotive access to goods and services enables children, seniors, and those with mobility impairments equitable access. Building walking into daily routines makes it easier to achieve recommended levels of physical activity.</td>
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<tr>
<td>1.1.3 Strengthen neighborhood centers by promoting transit-oriented development around identified stations</td>
<td>8. Square feet of new development within 1/4 mile of rail station 9. Number of parcels (or square footage of land) within TOD development districts upzoned to encourage higher density development 10. Proportion of city land area subject to TOD standards as defined by new Code 11. Proportion of total population within TOD development areas 12. Population with TOD census tracts reporting commute to work via transit</td>
<td>L&amp;I, PCPC, PCPC, PCPC, PCPC, PCPC</td>
<td>Lowering vehicle miles traveled (VMT) improves air quality, which can have a strong positive impact on respiratory health (traffic density is strongly correlated with reduced lung function). Decreased automobile usage and lower traffic volumes are correlated with fewer auto-pedestrian accidents resulting in injuries and fatalities. Emissions are a primary source of PM2.5. Studies show strong association between negative cardiovascular outcomes and PM2.5.</td>
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<tr>
<td>1.1.4 Provide convenient access to healthy food for all residents by locating food production and distribution facilities in neighborhood and metropolitan centers</td>
<td>13. Number of healthy food sources (supermarkets, farmers’ markets, healthy corner stores, produce vendors) 14. Access to healthy food (weighted scores based on PDPH Food Access Study) 15. Proportion of population within 10 minute walk of healthy food sources 16. Ratio of healthy food sources to fast food outlets 17. Square footage of land zoned to permit urban agriculture as of right 18. Proportion of fresh food vendors accepting Philly Food Bucks, SNAP, WIC</td>
<td>PDPH, TFT, PDPH, PCPC, PDPH, PCPC, MOS, PDPH, PCPC, PCPC, PCPC</td>
<td>The presence of a supermarket in a neighborhood predicts greater consumption of fruits and vegetables and a reduced prevalence of overweight and obesity. Facilities such as farmers’ markets and urban farms provide opportunities for social interaction and educational experiences for children, while providing direct access to produce and other goods at affordable prices.</td>
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<tr>
<td>1.2.3 Promote new housing developments to strengthen existing neighborhood assets</td>
<td>19. Number of infill projects 20. Number of non-contiguous vacant properties 21. Number of or acreage of parcels rezoned from industrial to other uses through remapping located in neighborhood centers 22. % of publicly funded units within 1/4 mile of transit or commercial corridor</td>
<td>TBD, RDA, PP, PCPC, PHA, PHDC, local CDCs, PCPC</td>
<td>Research shows significant reduction in the chances of being obese and overweight in places with higher densities, a mix of uses, and better street connectivity. Infill housing creates sufficient population density to attract health-supportive goods and services such as fresh food markets. Attracting these services to neighborhoods improves walkability.</td>
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<tr>
<td>2.2.2 Reposition former industrial sites for new users</td>
<td>23. $ spent on remediation/feasibility studies for reuse of sites 24. # of scattered vacant industrial sites 25. Acreage of land zoned for industrial mixed use as defined in the new Code</td>
<td>TBD, PIDC, RDA, MOS, PCPC</td>
<td>Increasing the mix of uses in a neighborhood improves walkability and reduces reliance on automobiles (see 1.1.1 - 1.1.3 above).</td>
</tr>
<tr>
<td>Citywide Plan Objective</td>
<td>Indicators</td>
<td>Agencies</td>
<td>Health-based Rationale</td>
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<tr>
<td>4.1.1 Invest in existing infrastructure to improve service and attract riders</td>
<td>26. Percent of system in state of good repair&lt;br&gt;27. Money spent/committed to projects to improve existing transit system&lt;br&gt;28. System ridership and percent of mode share captured&lt;br&gt;29. Linear miles of net new track/total route miles&lt;br&gt;30. Money received through New Starts, EDA/HUD/DOT and other funding sources to expand system&lt;br&gt;31. Number of feasibility, engineering, and design studies in progress for projects identified in Philadelphia2035&lt;br&gt;32. Proportion of population within 1/4 mile walking distance of rapid transit</td>
<td>SEPTA&lt;br&gt;MOTU, SEPTA&lt;br&gt;SEPTA, PCPC</td>
<td>Public transit users are more likely to achieve recommended levels of physical activity by walking or biking to complete their trips. Risk of injury and death increase with increased travel by automobile.</td>
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<tr>
<td>4.1.2 Extend transit network to serve new markets</td>
<td>33. Linear miles of Complete Streets as defined by forthcoming Complete Streets Manual from Mayor’s Office of Transportation and Utilities&lt;br&gt;34. Linear miles of auto travel lane --&gt; bike lane conversions&lt;br&gt;35. Linear miles of dedicated transit lanes</td>
<td>MOTU, Streets&lt;br&gt;MOTU, Streets&lt;br&gt;MOTU, Streets, SEPTA</td>
<td>Air pollution and greenhouse gas emissions increase with vehicle miles traveled (VMT). Poor air quality is linked to both respiratory and cardiovascular conditions ranging from asthma to heart disease. A 2007 study found that New York City residents’ Body Mass Index (BMI) ratings tend to decline significantly with greater subway and bus stop density, higher population density, and mixed land uses.</td>
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<tr>
<td>4.2.1 Implement a Complete Streets Policy for the city to ensure that the right of way will provide safe access for all users</td>
<td>36. Number of improvements implemented as recommended in the Philadelphia Pedestrian and Bicycle Plan&lt;br&gt;37. Linear miles of dedicated on-street bike lanes&lt;br&gt;38. Number of pedestrian bicycle and pedestrian injuries and fatalities</td>
<td>MOTU, PCPC&lt;br&gt;MOTU, Streets&lt;br&gt;PennDOT, Police</td>
<td>Complete Streets provide safe opportunities for active transportation (walking and biking). Health benefits of physical activity include a reduced risk of premature mortality and reduced risks of chronic diseases associated with obesity, including heart disease, hypertension, and colon cancer.</td>
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<tr>
<td>4.2.2 Improve safety for pedestrians and bicyclists and reduce pedestrian and bicycle crashes</td>
<td>39. Linear miles of on- and off-street trails, sidepaths, waterfront trails planned/constructed/completed&lt;br&gt;40. Linear miles of dedicated on-street bike lanes, buffered lanes, cycle tracks&lt;br&gt;41. Linear footage of new sidewalks added&lt;br&gt;42. Number of on-street bicycle parking stations</td>
<td>MOTU, Streets&lt;br&gt;PCPC, SRDC, DRWC&lt;br&gt;MOTU, PCPC, CCD&lt;br&gt;MOTU, Streets&lt;br&gt;MOTU</td>
<td>Off-street trails, buffered bike lanes, and grade-separated pedestrian facilities improve safety for cyclists and pedestrians.</td>
</tr>
<tr>
<td>4.2.3 Expand on- and off-street networks serving pedestrians and bicyclists</td>
<td>43. Number of parking spaces in off-street parking garages in Center City&lt;br&gt;44. Street meter occupancy&lt;br&gt;45. Traffic volume&lt;br&gt;46. Automobile modeshare</td>
<td>PCPC&lt;br&gt;MOTU, PPA&lt;br&gt;PennDOT, MOTU&lt;br&gt;PCPC</td>
<td>Off-street trails, buffered bike lanes, and grade-separated pedestrian facilities improve safety for cyclists and pedestrians. Commuting on foot or by bike builds physical activity directly into daily routines, making it easier to achieve recommended levels of fitness and decreasing the chance of obesity- and overweight-related illnesses.</td>
</tr>
<tr>
<td>4.3.2 Control automobile congestion through traffic management and planning</td>
<td>47. Money received to design and implement new pedestrian connections&lt;br&gt;48. Number of pedestrian connections under/over I-95 constructed&lt;br&gt;49. Number of pedestrian connections across railroads</td>
<td>TBD&lt;br&gt;DRWC, PennDOT&lt;br&gt;TBD</td>
<td>Auto congestion contributes to poor air quality, particularly PM2.5, fine particulate matter from auto emissions linked strongly to cardiovascular and respiratory conditions. Increasing the supply of parking induces demand, generating more trips by car, discouraging walking and biking, and increasing the chance of vehicular collisions with cyclists and peds.</td>
</tr>
<tr>
<td>4.3.4 Improve pedestrian connections across major rights-of-way</td>
<td></td>
<td>TBD</td>
<td>Improving and increasing safe access to recreational amenities is correlated to greater use of those facilities for passive and active recreation. Creating pedestrian linkages to the waterfront reduces reliance on automobiles to reach planned parks and trails.</td>
</tr>
<tr>
<td>Citywide Plan Objective</td>
<td>Indicators</td>
<td>Agencies</td>
<td>Health-based Rationale</td>
</tr>
<tr>
<td>------------------------</td>
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</tr>
<tr>
<td><strong>6.1.1 Complete independent and park-based trail systems</strong></td>
<td>50. Number of planned trail projects completed (or linear mileage) 51. Annual level of Parks &amp; Recreation funding relative to need 52. Private funds devoted to trail design and construction</td>
<td>SRDC, DRWC, PEC, Parks &amp; Rec, PCPC TBD</td>
<td>A complete trail network facilitates access to the outdoors, increases opportunities for physical activity, and makes cycling and walking viable commuting options for a significant proportion of the population.</td>
</tr>
<tr>
<td><strong>6.1.2 Create a corridor network that connects parks, neighborhoods, and trails citywide</strong></td>
<td>53. Number of miles of new park trails 54. Number of Complete Streets that serve trailheads 55. Number of Complete Streets that intersect major parks 56. Proportion of citywide population within 1/4 mile of the corridor network</td>
<td>Parks and Rec MOTU, PCPC MOTU, Parks &amp; Rec PCPC</td>
<td>Many neighborhoods currently lack access to the trail system which exists largely on the city's two waterfronts. Improving pedestrian and cycling connections to these resources improves equitable access to this important part of Philadelphia’s active transportation infrastructure.</td>
</tr>
<tr>
<td><strong>6.2.1 Improve and increase waterfront recreational opportunities</strong></td>
<td>57. Money spent on transit infrastructure that improves waterfront access 58. Linear feet of greenways/green streets/Complete Streets constructed to riverfront access points 59. Linear miles of accessible waterfront 60. Number of on-water access points (docks, put-in points, etc.) 61. Number and square acreage of waterfront parks 62. Acreage of waterfront land rezoned from industrial to residential or mixed use</td>
<td>MOTU, SEPTA MOTU, PWD, others DRWC, SRDC, PCPC DRWC, SRDC DRWC, SRDC PCPC</td>
<td>Waterfronts are a major opportunity area to create new open spaces for some of the city's underserved populations. Numerous studies show a positive association between the provision of attractive recreational spaces and an increase in walking and physical activity. In busy urban environments, open spaces promote stress reduction, and have been linked to reduced depression and better self-rated health.</td>
</tr>
<tr>
<td><strong>6.3.1 Ensure that all Philadelphians live within a 10 minute walk of a neighborhood park or recreation center</strong></td>
<td>63. Proportion of citywide population within 1/4 mile walking distance of Parks and Recreation facilities</td>
<td>PCPC, Parks &amp; Rec, MOS</td>
<td>Numerous studies show a positive association between the provision of attractive recreational spaces and an increase in walking and physical activity. Physical activity is more likely to occur when public open space exists within close proximity to residences. Children who live within shorter distances to recreational facilities tend to be more active.</td>
</tr>
<tr>
<td><strong>6.3.2 Connect neighborhood parks and trails to neighborhood centers and major public facilities</strong></td>
<td>64. Number of safe routes between neighborhood centers, major public facilities, and Parks and Rec centers as measured by Walkability Assessment Tool scores 65. Money spent on roadway improvements that improve walkability and safety between major public facilities and Parks &amp; Recreation facilities 66. Total linear feet (for railroad corridors and utility rights of way) and/or total acreage (for parcel-based industrial facilities) returned to productive use</td>
<td>MOTU, PCPC TBD TBD</td>
<td>Numerous studies show a positive association between the provision of attractive recreational spaces and an increase in walking and physical activity. Physical activity is more likely to occur when public open space exists within close proximity to residences. The number of neighborhood parks in proximity to one's residence and the types of amenities at the park predict the duration of physical activity in children.</td>
</tr>
<tr>
<td><strong>8.1.2 Rehabilitate abandoned industrial infrastructure for new uses</strong></td>
<td>67. Number of formerly industrial buildings reused for residential or community use 68. Percentage of Philadelphia2035 corridor and trail network implemented using industrial rights of way</td>
<td>TBD TBD</td>
<td>Underutilized or abandoned industrial rights-of-way are often located in low-income areas that lack adequate access to recreational amenities. (see 6.1.1 - 6.3.2 above for additional evidence base).</td>
</tr>
<tr>
<td><strong>9.1.1 Preserve the walkable scale of the city</strong></td>
<td>69. Number of pedestrians counted at key intersections and along key corridors 70. Number of zoning variances granted to permit curbcuts, parking facilities, and other design features shown to decrease pedestrian safety 71. Total acreage of zoning map revisions that apply pedestrian-friendly zoning</td>
<td>DVRPC, MOTU,PCPC PCPC PCPC, PIDC, PCPC</td>
<td>Walking is the easiest way to build physical activity into daily routines and has the lowest environmental impact of any commute mode. Collisions, injuries, and fatalities rise with higher rates of automobile usage.</td>
</tr>
</tbody>
</table>
### Demographics

(partial list, additional indicators under consideration)

- Population density
- District population by race
- Per capita and household median income
- Proportion living below the poverty level
- Average household size
- Unemployment
- Residential mobility
- High school graduation rate
- Proportion population non-english speaking
- Proportion foreign-born
- Proportion of youth
- Proportion of seniors

### Health Outcomes

(partial list, additional indicators under consideration)

- Proportion of families with children under 18
- Asthma hospitalization rate per 1,000
- Diabetes hospitalization rate per 1,000
- Heart failure hospitalization rate per 1,000
- Obesity rate per district
- Hypertension rate per district
- Diabetes cases (self-reported)
- Asthma cases (self-reported)
- Leading causes of death by age-adjusted death rates
- Leading causes of death by years of life lost
- Infant mortality rate

**Notes:**

**Agency** refers to the agency that maintains the datasets necessary to calculate or analyze the given indicator. This does not necessarily mean that the indicator has already been calculated/tracked/analyzed. Many of the indicators will be addressed as District Plans progress. If no agency is listed next to an indicator, it means that the appropriate agency and/or data source have not been confirmed.

Agency/partner organization abbreviations are as follows:

- **Commerce** - Philadelphia Department of Commerce. **DRWC** - Delaware River Waterfront Corporation; **DVRPC** - Delaware Valley Regional Planning Commission; **L&I** - Licenses & Inspections; **MOS** - Mayor’s Office of Sustainability; **MOTU** - Mayor’s Office of Transportation and Utilities; **PEC** - Pennsylvania Environmental Council; **TFT** - The Food Trust; **Parks & Rec** - Philadelphia Parks and Recreation; **PCPC** - Philadelphia City Planning Commission; **PDPH** - Philadelphia Department of Public Health; **PennDOT** - Pennsylvania Department of Transportation; **PHA** - Philadelphia Housing Authority; **PHDC** - Philadelphia Housing Development Corporation; **PIDC** - Philadelphia Industrial Development Corporation; **Police** - Philadelphia Police Department; **PP** - Public Property; **PPA** - Philadelphia Parking Authority; **RDA** - The Redevelopment Authority; **SEPTA** - Southeastern Pennsylvania Transportation Authority; **SRDC** - Schuylkill River Development Corporation; **Streets** - Philadelphia Streets Department;

**Demographics** data will be collected using the U.S. Census 2010 as it is released, and is analyzed by the City Planning Commission (PCPC).

**Health Outcomes** data comes from the Philadelphia Health Management Corporation (PHMC) Household Health Survey 2010, and is analyzed by the Philadelphia Department of Public Health (PDPH). Additional data comes from files provided by the Pennsylvania Department of Health.

PCPC will make every effort to share data, maps, and charts as they are produced through the Philadelphia2035 website, www.philadelphia2035.com. Eventually, we hope to create an interactive online portal that will allow the public to look at the indicators of interest to them and compare across districts. PHILATool is a dynamic tool that will be edited, expanded, and modified throughout the process. Public input is welcome.
APPENDIX 5:

Peel Healthy Development Index (HDI) – Initial Scoring Guide and Scorecard
How to use the Peel Healthy Development Index

The Peel Healthy Development Index is divided into seven built environment elements, each containing a combination of prerequisite and credit requirements. These requirements are further broken down into specific measures, which have been constructed from the relevant scientific and theoretical literature, that will be used to evaluate a development proposal. A community must meet all prerequisite requirements in order to receive approval from Peel Public Health. And, additional certifications (Gold, Silver, Bronze) can be achieved by obtaining a particular number of credits.

The Healthy Development Index consists of two documents that are designed to be used in tandem for evaluating proposed community throughout all stages of the planning process.

The Scorecard is a two-page evaluation document used to record a community’s progress in satisfying both prerequisites and credit requirements. The user will check off prerequisites as they have been achieved and record credit values. At the end, satisfying all of the prerequisites will determine approval (or not), and the total credit score will determine the level of certification (Certified, Bronze, Silver, or Gold).

The Scoring Guide provides detailed descriptions of how to evaluate the prerequisite and credit requirements for a given community. In the case of credits, communities can earn more credits by implementing thresholds or ranges that have a stronger positive association with creating activity-friendly environments. The Scoring Guide should be referred to throughout the planning and evaluation process, with resulting achievements recorded on the Scorecard.

Note that the term ‘community’ is used throughout this Index in order to refer to any greenfield or intensification development projects.
Peel Healthy Development Index Elements

1. Density

1. a. Minimum Density (Residential and Non-Residential) – Prerequisite:

- Minimum net residential dwelling density = 35 residential units/hectare
- Minimum average Floor Area Ratio (FAR) for non-residential, mixed use, and multifamily structures = 0.7

Description:
Communities must achieve a minimum net residential dwelling density of 35 units/hectare. This value is to be averaged across the community, and the net area used in the calculation shall include all buildable land, excluding public spaces, streets, and other public rights of way. Rental units such as basement apartments, ‘granny flats,’ and other accessory apartments shall count as additional dwelling units and should be included in this calculation. Mixed use buildings (e.g., residential on top of commercial) are strongly encouraged in order to achieve both density and proximity target. And…

Communities must achieve a minimum average Floor Area Ratio (FAR) of 0.7 for all non-residential, mixed-use, and multifamily structures in the community. The FAR is calculated as the gross building area (excluding any parking facilities) divided by the total lot area (excluding any public rights of way including but not limited to: parks; outdoor recreational spaces; public squares). This FAR prerequisite is not an average and must be met by every applicable building.

We recommend that buildings greater than 6 stories in height are restricted to transit nodes. Ideally, density and FAR requirements should be met through compact low-rise communities. This is recommended, because tall buildings can degrade the environment, in terms of energy consumption (to build and to maintain), forces of nature (e.g., wind, sun), social and psychological interactions, and aesthetics. One way to discourage high-rises is to only count the first 6 floors for density and FAR measurements.

1. b. Net Residential Dwelling Density – Credit:

- 35-44 residential units/hectare (1 credit)
- 45-64 residential units/hectare (4 credits)
- 65-84 residential units/hectare (7 credits)
- 85+ residential units/hectare (10 credits)

Description:
Communities can earn credits by meeting the above target ranges of net residential dwelling density. This value is to be averaged across the community, and the net area...
used in the calculation shall include all buildable land, excluding public spaces, streets, and other public rights of way. Rental units such as basement apartments, ‘granny flats,’ and other accessory apartments shall count as additional dwelling units, and should be included in this calculation. See section 1.a. for our building height recommendation.

### 1. c. Average Floor Area Ratio (non-residential-only structures) – Credit:

- FAR = 0.70-0.80 (1 credit)
- FAR = 0.81-0.95 (2 credits)
- FAR = 0.96-1.25 (4 credits)
- FAR = 1.26-1.75 (6 credits)
- FAR = 1.76-2.5 (8 credits)
- FAR > 2.5 (10 credits)

**Description:**

Communities can earn credits by meeting the above target ranges of average Floor Area Ratio (FAR) for all non-residential, mixed-use, and multifamily structures in the community. The FAR is calculated as the gross building area (excluding any parking facilities) divided by the total lot area (excluding any public rights of way including but not limited to: parks; outdoor recreational spaces; public squares). The FAR value shall be calculated as an average for the entire community, with the FAR value of each non-residential and/or mixed-use structure being weighted equally. See section 1.a. for our building height recommendation.

### 2. Service Proximity

#### 2. a. Proximity to a Variety of Services and Employment – Prerequisite:

- ≥ 75% of residential units must be within ≤ 800m of ≥ 5 neighbourhood public services*
- ≥ 75% of residential units must be within ≤ 800m of ≥ 7 neighbourhood retail services**
- The centre of primarily residential communities must be within ≤ 800m of the same number of full- and part-time jobs as 50% of the total number of residential dwelling units in the community.
- The centre of primarily non-residential communities must be within ≤ 800m of the same number of residential units as 50% of the total number of full- and part-time jobs in the community.
- *We may want to include another option of being able to access sufficient numbers of jobs using transit.*

*Neighbourhood public services include but are not limited to: childcare, community garden, hospital or health clinic, public library, plaza, playing field, park or natural open space of ≥ 1/3 hectare, performance/cultural space, post office, recreation centre, and public school.
Neighbourhood retail services include but are not limited to: bank, beauty salon or barber, bike shop, convenience stores not located at gas stations, dry cleaner, restaurants and cafes, gym/fitness centre, hardware store, laundromat, pharmacy, retail food market (including supermarket, produce store, butcher), entertainment (e.g., video store or movie theater), and a suitable transit stop (see 2.c. for the definition of a suitable transit stop). Gas stations are not included.

**Description:**

A minimum of 75% of residential dwelling units in the community must be located within a maximum walking distance of 800m of at least 5 neighbourhood public services and 7 neighbourhood retail services. It is necessary to calculate this measure for each individual dwelling in the community to determine if the percentage requirement is met. The same type of service can be counted more than once per dwelling if multiple locations exist. However, a maximum of 2 transit stops may counted, per dwelling.

And…

Communities that are primarily residential must locate the centre of their residential component within 800m of the same number of full- and part-time jobs as 50% of the total number of residential dwelling units in the community (i.e., a primarily residential community of 100 dwelling units has 50 full- and part-time jobs within an 800m walk of it’s centre).

Or…

Communities that are primarily non-residential must locate the centre of their non-residential component within 800m of the same number of residential units as 50% of the total number of full- and part-time jobs in the community (i.e., a primarily non-residential community with 100 full- and part-time jobs has 50 dwelling units within an 800m walk of it’s centre).

**Note:** When possible, all proximity requirement distances should be measured along the network of walkable streets and paths in the community, not as Euclidean (straight-line) distance. If Euclidean distance must be used, barriers such as ravines, expressways, and water bodies must be taken into consideration.

**2. b. Proximity to a Variety of Services – Credit:**

- ≥ 75% of residential units within ≤ 800m of ≥ 13 neighbourhood services* (1 credit)
- ≥ 75% of residential units within ≤ 800m of ≥ 16 neighbourhood services* (3 credits)
- ≥ 75% of residential units within ≤ 800m of ≥ 20 neighbourhood services,* including at least 3 food markets,** and at least 1 park ≥ 1/3 hectare (10 credits)
- 100% of residential units within ≤ 800m of ≥ 20 neighbourhood services,* including at least 3 food markets,** and at least 1 park ≥ 1/3 hectare (15 credits)

**Description:**
Communities can earn credits by meeting the above service proximity target ranges. Distances are measured along the network of walkable streets and paths in the community, where possible.

*Neighbourhood services include both the public and retail services listed in 2.a., and multiple locations of the same service can be counted. A maximum of 2 transit stops per dwelling may be counted towards the above credit measures.

**Food markets include grocery stores, supermarkets, produce markets, and butchers; however, they exclude convenience stores.**

### 2. c. Proximity to Transit – Credit:

- ≥ 60% of residential units within ≤ 800m of a suitable transit stop* (1 credits)
- ≥ 75% of residential units within ≤ 800m of a suitable transit stop* (3 credits)
- As above and ≥ 60% of residential units within ≤ 400m of a suitable transit stop* (7 credits)
- ≥ 90% of residential units within ≤ 800m and ≥ 70% of residential units within ≤ 400m of a suitable transit stop* (10 credits)

**Description:**
Communities can earn credits by meeting the above targets for proximity to local and regional transit. All distances are measured along the network of walkable streets and paths in the community, where possible.

* A suitable transit stop is defined as a public transit stop that provides a direct route to a Regional Urban Node, Intensification Corridor, or similar higher-density, mixed-use, transit-supportive activity centre within a maximum transit trip of 30 minutes.

### 2. d. Proximity to Employment -- Credit:

- ≥ 75% of residential units with a 30-minute transit trip* of ≥ 60,000 jobs (1 credits)
- ≥ 75% of residential units with a 30-minute transit trip* of ≥ 80,000 jobs (3 credits)
- ≥ 75% of residential units with a 30-minute transit trip* of ≥ 100,000 jobs (5 credits)
- ≥ 75% of residential units with a 30-minute transit trip* of ≥ 120,000 jobs (7 credits)
- ≥ 75% of residential units with a 30-minute transit trip* of ≥ 140,000 jobs (10 credits)

**Description:**
Communities can earn credits by meeting the above targets for proximity to employment.

* A transit trip is defined as the total travel time between a residential dwelling unit’s front door to a workplace’s front door, without the use of private motorized vehicles for transport (i.e., walking, cycling, and public transit are the only included transport modes).
3. Land Use Mix

Despite its vital importance to walkable communities, this Index does not include a Land Use Mix prerequisite. Why? Land use mix is created through the combination of density and proximity: It is determined by the relative distribution and concentration of people and services in a given area. Through the density prerequisite, communities must have high residential densities that are capable of supporting nearby services. Through the proximity prerequisite, communities must provide a variety of both public and retail services nearby those residences, thus creating an effective mix of land uses.

Development in the past half-century is characterized by the segregation of residential and non-residential uses, leading to car-oriented sprawl in which one drives to even the most basic services. Land use mix encourages daily destinations (e.g., grocery, workplace) within walking/cycling distance to local residences.

Many recent attempts at mixed-use communities have failed. The prerequisite and credit requirements in this Index attempt to address these failures; e.g., parking requirements that limit density, affordability, and human scale; isolation from all but a few daily services and amenities; setbacks and other aesthetic problems that limit pedestrian comfort and convenience. Therefore, healthy communities are those that possess a land use mix that provides: a) a sufficient density of residents to support a variety of public and private services, as well as full- and part-time jobs (i.e., prerequisite 1.a.); b) a relative balance of residential and employment densities (i.e., prerequisite 2.a.), so that walking and cycling to work is an option for most residents/employees; and c) a wide variety of public (e.g., schools, parks) and retail (e.g., grocery, pharmacy) services within walking distance of most residents (prerequisite 2.a.), so that daily needs and activities can be satisfied without the use of a car. Additionally, this mix of land uses should be accompanied by pedestrian-friendly design, as captured in Key Recommendation 6.a. and prerequisites 5.a. and 7.a..

3. a. Heterogeneity of Land Use Mix – Credit:

Up to 10 credits total can be earned from the below Heterogeneity of Land Use Mix measures:

- ≥ 5% of total community land is outdoor public space (3 points)
- Community provides ≥ 4 new services* to an existing neighbourhood (within a 1km radius of the community centre) (3 points)
- There is a mix of 3 housing types*, 6 different services*, a public school, and a park ≥ 0.4/ha within 800m of the community centre (5 points)

Description:

Communities can earn credits by meeting the above targets for heterogeneity of land use mix. An outdoor public space is defined as a plaza, square, park, or green space on public land.

*See 2.a. for a description of services and 3.c. for housing types.
3.b. Heterogeneity of Parcel/Building Use – Credit:

Up to 10 credits total can be earned from the below Heterogeneity of Parcel/Building Use measures:

- ≥ 60% of commercial buildings include a ground floor pedestrian use along ≥ 60% of their street façades (4 points)
- 100% of mixed-use buildings include ground floor retail, live/work spaces, or residential dwellings along ≥ 60% of their street façade (4 points)
- ≥ 50% of multifamily residential buildings have a pedestrian use on the ground floor (4 points)

Description:

Communities can earn credits by meeting the above targets for heterogeneity of parcel use. Pedestrian uses include but are not limited to the neighbourhood retail and public services as described in 2.a. A multifamily residential building refers to an apartment-style building, in this case, not town homes or row houses.

3. c. Mixed Housing Types – Credit:

- ≤ 30% of housing is large lot detached homes (3 points)
- As above and the community includes ≥ 3 housing types, with none making up less than 20% of the total residential units (5 points)

Description:

Communities can earn credits by meeting the above targets for mixed housing types. Large lots are those greater than 15m wide (street side). Housing types include detached, semi-detached, town home or row house, multifamily (apartment), and co-operative. Pedestrian uses include but are not limited to the neighbourhood retail and public services as described in 2.a.

4. Street Connectivity

4. a. Intersection Density or Block Size – Prerequisite:

- Minimum average intersection density = 75 intersections/km²
- Maximum single block size = 1.5ha (not an average)

Description:

Communities must achieve a minimum average intersection density of 75 intersections/km². Intersection density is averaged across the community. An intersection is defined as any publicly-accessible 3- or 4-point intersection. Intersections at cut-throughs for pedestrians and/or cyclists to immediately adjacent roads (i.e., an
intersection that forces cars to turn or turn around but allows pedestrians and/or cyclists to travel through) can count for up to 20% of the total intersections in the community. Intersections between streets and bike or multiuse paths can count for up to 20% of the total intersections.

And...

All blocks within a community must have a block size of no more than 1.5ha. The maximum block size measurement is not an average and is measured as the total land area of a block, excluding right-of-ways.

Exceptions need to be made for parks, so that they are not limited to 1.5ha or smaller. However, encouraging or requiring bike/walk connectivity within those parks larger than 1.5ha is an important consideration – particularly for areas with natural obstructions (e.g., ravines).
4. b. Intersection Density – Credit:

- 75-114 intersections/km² (1 point)
- 115-149 intersections/km² (5 points)
- 150+ intersections/km² (10 points)

Description:

Communities can earn credits by meeting the above target ranges for intersection density. Intersection density is measured as described above in 4.a.

5. Road Network and Sidewalk Characteristics

5. a. Complete Streets (sidewalks, bike lanes, traffic speed) – Prerequisite:

Streets must be 'complete' based on the following requirements:

- 31-40km/h Lanes: 1-2. Lane width: ≤ 3.2m. Sidewalks: 2. Bike lanes: 1-2**.
- 41-50km/h Lanes: 2-4. Lane width: ≤ 3.2m. Sidewalks: 2. Bike lanes: 2
- All new local roads ≤ 40km/h
- All new non-local roads ≤ 50km/h

*A single lane road (e.g., woonerf) may be up to 5m wide when it’s shared by two-way vehicular traffic.

**A single bike lane is suitable when the vehicular lane is one-way, either to give cyclists a safe route ‘against’ or with traffic. Also, a single bike lane with two directions (two lanes) on one side of the road may be suitable for certain road designs.

Description:

Community streets must include the above features that match their speed limit. Number of lanes is equivalent to the number of motorized vehicular travel lanes, including central turning lanes but excluding bike and curb/parking lanes. Lane width is the motorized travel lane width, excluding bike and curb/parking lanes. Bike lanes must be at least 1.2m wide. Allowance for curb lanes should only be made when used for on-street parking.

And…

All local roads within a community must have a speed limit of 40km/h or less, and the associated design features listed above. All new non-local roads (excluding expressways) within a community must have a speed limit of 50km/h or less, and the associated design features listed above.
5. b. Traffic Calming – Credit:

- 4-6 traffic calming measures*/hectare (1 credit)
- 7-10 traffic calming measures*/hectare (3 credits)
- 11-13 traffic calming measures*/hectare (5 credits)
- 14+ traffic calming measures*/hectare (7 credits)
- 1 or more pedestrian-priority streets*/hectare (3 additional credits to the above credit scores)

Description:

Communities can earn credits by meeting the above target ranges for traffic calming measures. All traffic calming measure target ranges are calculated as an average across the entire community.

And…

A maximum of two features of the same type of traffic calming measure can be counted for each individual hectare in the community (e.g., a maximum of two speed bumps, for each individual hectare, may be counted).

*Suitable types of traffic calming measures include, but may not be limited to:

- ‘pedestrian-priority’ streets or ‘woonerfs’ or ‘home zones’ (speed limit under 15km/h, vehicles must yield to pedestrians and cyclists)
- traffic circle or roundabouts
- speed hump
- bollards (short vertical posts)
- channelization island (raised islands that force traffic to turn in a particular direction)
- chicane (curb bulges or planters on alternating sides, forcing motorists to slow down)
- choker (raised islands in parking zones that narrow a roadway)
- curb extension, planter, or centerline traffic island that narrows traffic lanes
- horizontal shift (a lane centerline that curves or shifts)
- parking restrictions for on-street parking such as residential permit parking
- pavement treatments and markings at intersections (e.g., brick paving)
- ‘zebra’ crosswalk
- rumble or warning strip
- semi-diverter or partial closure (restricts entry and limits traffic flow at intersections)
- signal timing to reduce traffic speeds
- radar trailer that shows drivers their current speed and the posted speed limit
- speed limit sign
- speed table or raised crosswalk
- street trees planted between road and sidewalk for an entire block (< 9m apart)
- corner radii ≤ 3.2m for local roads (increase curb lane on roads with a bus route)
5. c. Traffic Speed and Pedestrian-priority – Credit:

- 10-19% of local roads are ≤ 15km/h with pedestrian-priority* (1 credit)
- 20-29% of local roads are ≤ 15km/h with pedestrian-priority* (3 credits)
- 30-39% of local roads are ≤ 15km/h with pedestrian-priority* (6 credits)
- ≥ 40% of local roads are ≤ 15km/h with pedestrian-priority* (10 credits)

Description:

Communities can earn credits by meeting the above traffic speed and pedestrian-priority target ranges. The speed of 15km/h refers to the posted speed limit.

*’Pedestrian-priority’ refers to a street or neighbourhood designation in which motorized vehicles must yield to non-motorized traffic (e.g., walking, cycling, playing children) and cyclists must yield to pedestrians -- also known as a ‘woonerf’ or ‘home zone’. Car-free streets also count as pedestrian-priority.

5. d. Sidewalks and Buffer Strips – Credit:

- Average sidewalk width ≥ 2.5m on all mixed-use streets (1 credit)
- As above and buffer strips and/or curbside parking on both sides of all roads > 30km/h (3 credits)
- As above and buffer strips with physical barriers on both sides of all roads ≥ 50km/h (5 credits)

Description:

Communities can earn credits by including the above sidewalk and buffer strip features. Averages are calculated across the entire community area. Mixed-use streets are defined as those containing both residential and commercial uses. All speeds listed above are the posted speed limit. Buffer strips must be a minimum of 1m wide, and could simply be an extension of the sidewalk, though grass strips with natural features are preferred. Buffer strips including trees should be wide enough to ensure tree health. Physical barriers include but are not limited to planters, trees, hedging, garbage/recycle bins, lamp posts, and public art. Physical barriers should not block the pedestrians’ view of the roadway, and must be placed a maximum of 10m apart. Trees are highly recommended.

5. e. Cycle-friendly Design – Credit:

Up to 10 credits total can be earned from the below Cycle-friendly Design measures:

- dedicated raised bike lanes, as an extension of the sidewalk (5 credits)
- bicycle-priority streets (cars must yield to cyclists; speed ≤ 30km/h) (5 credits)
- streets that are one-way for cars; two-way for cyclists; speed ≤ 30km/h (2 credits)
- cul-de-sacs with bicycle cut-throughs (2 credits)
- advance green lights for cyclists (1 credit)
• off-street pedestrian and cyclist shortcuts (2 credits)
• right-hand turn shortcuts for cycles (1 credit)
• 1 bicycle rack per ten car parking spots (includes on- and off-street spots) (3 credits)

**Description:**

Communities can earn up to 10 credits by including combinations of the above cycle-friendly design measures. In order to receive credit for a given measure the design must occur once per hectare, on average, across the community.

5. **f. Lighting – Credit:**

Up to 5 credits can be earned from the below Lighting measures:

• All mixed-use streets have an average luminance of 10 lux, with a minimum of 5 lux (3 credits)
• Provide ≤ 4.6m tall street lamps spaced no more than 30m apart on both sides of 80% of mixed-use streets (3 credits)
• Provide ≤ 4.6m tall aesthetically-pleasing (artistically-designed) lamp posts on both sides of 100% of mixed-use ‘core’ streets (2 credits).

**Description:**

Communities can earn up to 5 credits by including combinations of the above Lighting measures. All averages are calculated across the community (with streets segments weighted accordingly to their length)

*Note: Lighting may be used to deter crime in unlit enclave or sections of street.*

*Right now, residential is excluded because of a recommendation about the peacefulness of less lighting and the stars, but we may want to re-evaluate this.*

6. **Parking**

6. **a. Eliminate Parking Minimums – Key Recommendation:**

We strongly recommend the elimination of minimum parking requirements in all zoning by-laws applying to development in the Region of Peel, particularly near mixed-use centres and transit facilities. If requirements exist, then they should be in the form of *maximums*.

Why? Parking minimums lead to increased land requirements per building, which greatly decreases densities, increases development costs, encourages development on the periphery (where land is less expensive), and decreases housing affordability. Furthermore, large parking lots degrade the pedestrian-environment, contribute to the urban heat sink problem, and increase demand on storm water infrastructure.
Instead, we recommend the use of parking *maximums*. Developers should supply spaces to match average (*not* peak) demand, and/or to where revenue will cover costs. This will decrease development costs, increase housing affordability, and encourage activity-friendly initiatives such as car-free housing, car-sharing, and public transit use.

### 6. b. Unbundled and Shared Parking – Credit:

Communities can earn up to 7 credits by meeting one of the below measures:

- Provide unbundled parking for 50% of multifamily dwellings (1 credit)
- Provide unbundled parking for 75% of multifamily dwellings (5 credits)
- Provide unbundled parking for 100% of multifamily dwellings (7 credits)

*And* communities can earn an additional 3 credits by meeting the below requirement:

- Allow shared parking so that parking spaces can count towards the requirements of two separate uses', such as a civic building and a restaurant, or a place of worship and an office building (3 credits).

**Description:**

Communities can earn credits by meeting the above unbundled and shared parking requirements. 'Unbundled' parking refers to parking that is sold or rented separately from associated residential units, with costs made explicit. Shared parking refers to parking spaces that are shared by users with different peak periods of demand, allowing one space to count towards more than one structure's parking requirements (if they exist). Examples of sharing combinations: office (weekday) and restaurant (nights and weekend); civic building (weekday) and place of worship (weekend); retail stores (day) and movie theatre (night).

### 6. c. Parking Price and Difficulty – Credit:

Up to 10 credits can be earned from the below Parking Price and Difficulty measures:

- Charge the market rate* for off- and on-street parking for all mixed-use and retail streets (4 credits)
- Designated 'Parking Meter Zones' in which parking revenues go back into the zone for pedestrian-friendly and aesthetic improvements, such as public art, paving, street furniture, lighting, trees, cleaning, and painting/maintenance (3 credits)
- Use variable parking pricing, so that costs increase with the length of stay, or limit the length of stay to \( \leq 2 \) hours (2 credits)
- Maximum 2-hour on-street parking for non-residents or resident-only parking on all streets within 200m of a mixed-use centre (2 credits)
- Require employers to *cash-out* non-driving employees when employee parking is free (2 credits)

*the market rate is the price that results in 85-90% utilization during peak hours.

Discussion Document: Not for Distribution
We need to determine how some of these credits will be measured.

6. c. Parking Location and Alleys – Credit:

Up to 10 credits can be earned from the below Parking Location and Alleys measures:

- All residential driveways* are ≤ 3m wide (2 credits)
- ≥ 70% of residential dwellings have either no parking or access their parking via rear alleys or lanes and have no parking in their front setbacks (4 credits)
- All parking lots are placed at the rear or side of buildings (4 credits)
- ≥ 90% of residential lots do not have parking garages in their front façade (4 credits)
- Provide on-street parking on both sides of ≥ 70% of new streets, excluding ‘woonerfs’ (2 credits)

Description:

Communities can earn up to a total of 10 credits by including combinations of the above parking location and alley credit requirements. Note that all percentages are averaged across the entire community.

*Residential driveways include parking spots in the front setback, and driveways to rear or side parking. Shared driveways are encouraged.

Here or elsewhere: Do we want to include something about permeable lanes/alleys/woonerfs (gravel (not woonerfs), paving stones with grass, brick, etc., which are better for storm water infrastructure, etc.)?

7. Aesthetics and Human Scale

7. a. Building Setbacks – Prerequisite:

- Detached residential structures must have ≤ 7.6m building setback
- Attached and multifamily residential structures must have ≤ 4.6m building setback
- Commercial and light industrial structures must have ≤ 3m building setback
- ≥ 70% of commercial and/or mixed-use structures must have their front façade flush with the sidewalk
- Main entrances of residential, commercial, and light industrial buildings cannot front onto parking lots
**Description:**

Communities must meet the building setback targets outlined above. Building setbacks shall be measured at a right angle from the front façade of the proposed structure to the edge of the public right-of-way (road or sidewalk), not necessarily the property line.

And…

A minimum of 70% of commercial (and mixed-use?) structures must have their front façade flush with the sidewalk (0m setback) or street (in the case of pedestrian-priority streets without sidewalks). Structures at street intersections (corners) must have all of their street-facing facades flush with the sidewalk to be included in this calculation.

And…

Main entrances of residential, commercial, and light industrial buildings must face onto a public right-of-way (e.g., road, sidewalk) or public space (e.g., plaza, square), not a parking lot. A main entrance is defined as the primary pedestrian entranceway.

### 7. b. Building Height to Street Width Ratio – Credit:

- Average building height to street-width ratio between 1:3 and 1:2.1 (1 credit)
- Average building height to street-width ratio between 1:2 and 1:1.1 (3 credits)
- Average building height to street-width ratio between 1:1 and 3:1 (7 credits)

**Description:**

Communities can earn credits by meeting the above target ranges for building height to street width ratio. Building height shall be measured from the ground to the eave or roof deck, not the peak of the roof. For buildings exceeding 6 stories, only the height up to the top of the sixth story shall be counted. The average will be calculated across the entire community, with each building weighted equally. *In order to receive credit, direct sunlight must reach the street at all times of year (for X hours per day?).*

### 7. c. Setbacks and Streetwalls – Credit:

Up to 8 credits can be earned from the below Setbacks and Streetwalls requirements:

- ≥ 80% of commercial structures are flush to the sidewalk or street (3 credits)
- ≥ 80% of commercial lots that face public space* have clear glass on ≥ 60% of their façades, 1-2.4m above grade (3 credits)
- ≥ 80% of commercial lots do not have blank walls (no doors or windows) longer than 40%, or 15m, of a façade facing a sidewalk, front street, or plaza (2 credits)

120

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Description:

Communities can earn up to a total of 5 credits by including combinations of the above setback and streetwall requirements. Setbacks shall be measured as described in 7.a. *Public spaces include but are not limited to sidewalks, front streets, and plazas.

7. c. Tree Placement and Characteristics – Credit:

Up to 10 credits can be earned from the below Tree Placement and Characteristics requirements:

- ≥ 75% of new and existing residential streets in a community have ≥ 1 tree for every 10m of lot frontage on both sides of the street (4 credits)
- ≥ 75% of new and existing mixed-use streets have ≥ 1 tree for every 10m of lot frontage on both sides of the street (4 credits)
- ≥ 75% of streets with a speed limit of ≥ 50km/h have ≥ 1 tree for every 10m of lot frontage on both sides of the street, with the trees placed between the sidewalk and road (4 credits)

Description:

Communities can up to a total of 10 credits for including combinations of the above tree placement and characteristics requirements. Only trees that will grow ≥ 8m in height at maturity are included in the calculations. Pedestrian-priority streets are exempt from, but can be included in calculations. Large broadleaf shade streets that will grow to ≥ 15m tall at maturity and form a street-tree canopy are encouraged.

7. d. Outdoor Open Spaces – Credit:

- Communities give ≥ 5% of land to public outdoor spaces, such as parks and plazas (0 credits)

Description:

This is currently in the Land Use Mix section, as most other related credits are already in the Proximity section. Perhaps, however, we want to require that every house needs to be within 800m of a park, playground, or other activity-friendly outdoor space.
# Peel Healthy Development Evaluation Tool: DRAFT Scorecard for Discussion

## 1. Density

<table>
<thead>
<tr>
<th>a. Minimum Density (residential and non-residential)</th>
<th>Prerequisite</th>
<th>Y</th>
<th>?</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Net Residential Dwelling Density</td>
<td>Credit</td>
<td>/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Average Floor Area Ratio (non-residential structures)</td>
<td>Credit</td>
<td>/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

Total Credits: /20  
Credit Requirement: 5/20  
Meets Both Criteria: Y | ? | N

## 2. Service Proximity

<table>
<thead>
<tr>
<th>a. Proximity to a Variety of Services and Employment</th>
<th>Prerequisite</th>
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<th>?</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>b. Proximity to a Variety of Services</td>
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<td></td>
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<tr>
<td>c. Proximity to Local and Regional Transit</td>
<td>Credit</td>
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<td></td>
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<tr>
<td>d. Proximity to Employment</td>
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<td>/10</td>
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Notes:

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Credit Requirement: 7/35  
Meets Both Criteria: Y | ? | N

## 3. Land Use Mix

<table>
<thead>
<tr>
<th>a. Heterogeneity of Land Use Mix</th>
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</thead>
<tbody>
<tr>
<td>b. Heterogeneity of Parcel/Building Use</td>
<td>Credit</td>
<td>/10</td>
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<tr>
<td>c. Mixed Housing Types</td>
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Notes:

Total Credits: /25  
Credit Requirement: 9/25  
Meets Criteria: Y | ? | N

## 4. Street Connectivity

<table>
<thead>
<tr>
<th>a. Intersection Density or Block Size</th>
<th>Prerequisite</th>
<th>Y</th>
<th>?</th>
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<tbody>
<tr>
<td>b. Intersection Density</td>
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</table>

Notes:

Total Credits: /10  
Credit Requirement: 1/10  
Meets Both Criteria: Y | ? | N

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Discussion Document: Not for Distribution
## 5. Road Network and Sidewalk Characteristics

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<thead>
<tr>
<th></th>
<th>Complete Streets (sidewalks, bike lanes, traffic speed)</th>
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<tbody>
<tr>
<td>b.</td>
<td>Traffic Calming</td>
<td>Credit</td>
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<tr>
<td>c.</td>
<td>Traffic Speed and Pedestrian-priority</td>
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<td>d.</td>
<td>Sidewalks and Buffer Strips</td>
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<tr>
<td>e.</td>
<td>Cycle-friendly Design</td>
<td>Credit</td>
<td>/5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>Lighting</td>
<td>Credit</td>
<td>/5</td>
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Notes:  
Total Credits: /40  
Credit Requirement: 15/40  
Meets Both Criteria: Y ? N

## 6. Parking

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<th>Key Recommendation</th>
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<td>b.</td>
<td>Unbundled and Shared Parking</td>
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<tr>
<td>c.</td>
<td>Parking Price and Difficulty</td>
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<tr>
<td>d.</td>
<td>Parking Location and Alleys</td>
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Notes:  
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Credit Requirement: 13/30  
Meets Criteria: Y ? N

## 7. Aesthetics and Human Scale

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<th>Prerequisite</th>
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<th>?</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>Building Height to Street Width Ratio</td>
<td>Credit</td>
<td>/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Setbacks and Streetwalls</td>
<td>Credit</td>
<td>/8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>Tree Placement and Characteristics</td>
<td>Credit</td>
<td>/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>Open Outdoor Spaces</td>
<td>Credit</td>
<td>/0</td>
<td></td>
<td></td>
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</table>

Notes:  
Total Credits: /25  
Credit Requirement: 10/25  
Meets Both Criteria: Y ? N

## 8. Scoring Summary

Notes:  
Total Credits: /195  
Approved: Y ? N

Certification: 

Discussion Document: Not for Distribution
APPENDIX 6:

Sample chapter from Healthy Urban Development Checklist
(Chapter 15: Social Cohesion & Social Connectivity)
15 Social Cohesion & Social Connectivity
15 Social Cohesion and Social Connectivity

15.1 Introduction

Urban planning alone cannot create cohesive local communities with strong social networks and high levels of community involvement. However, social cohesion can be facilitated and encouraged by some aspects of the built environment, such as attractive places where people can meet and gather. At the same time, social cohesion can be undermined by some forms of development, such as housing projects that segregate disadvantaged groups, or transport corridors that sever community links or create barriers to connectivity.

Elements of social cohesion that are related to the planning of the built environment include:

- Social contact and interaction among neighbours
- Supportive social networks within the neighbourhood
- A strong sense of community, and feelings of belonging and attachment to place
- Participation in decision-making and involvement in neighbourhood activities and community organisations
- Fair and equitable access to resources
- Absence of social conflict, and perceptions of safety and security
- Avoidance of social exclusion, segregation or division.

Social interaction can occur in formal and informal, structured and unstructured ways. Unstructured and informal ways include casual encounters with neighbours, people in parks or cafes, while out shopping or walking the dog. More structured forms of social interaction include participation in community activities, voluntary groups and civic organisations, such as playgroups or sports clubs.

While direct relationships between the urban environment and social connectedness can be difficult to establish, a number of key associations have been found in the literature.

These include:\n\nDesigning walkable neighbourhoods – walking to and from local destinations creates opportunities for informal contact and casual encounters with other local residents.

Providing accessible community facilities and attractive public spaces that create opportunities for people to meet and connect with one another or participate in community events.

Proximity to employment, as long commute times between home and employment mean people have less time and energy for participation in social networks and community activities.

Geographically adjacent development patterns enable new residents to link with existing communities through using established facilities and services such as shops, cafes, neighbourhood centres, schools, libraries, sporting facilities and clubs. Geographically dispersed (leapfrog) development creates physical and social barriers with existing communities and is associated with a weakened sense of community.

Dissecting communities with busy arterial roads, railway lines or other substantial barriers can sever community networks and access to facilities.

Opportunities for social interaction and involvement in neighbourhood activities help to strengthen neighbourhood ties and build social support networks and a sense of belonging and attachment to the local area. Providing civic facilities and public spaces is also important in fostering a sense of community and local identity. Community identity can be further enhanced by designing neighbourhoods and buildings with distinctive and attractive character, often incorporating public art or design elements that reflect local cultural values.

The opportunity to participate in civic life has been identified as a core human need, and essential to the psychological health of individuals and communities. Participation may be influenced by the geographic and built characteristics of a particular district, place or space, a community’s demographic profile and its social and neighbourhood networks. Participation in the decisions that shape people’s surroundings and affect their lives is an integral component of their being sufficiently empowered to have some influence, and is part of promoting healthier built environments.

In encouraging socially cohesive communities, an important consideration is the impact of housing markets and land use policies on different socio-economic groups and the extent to which the proposed development may exacerbate socio-economic divisions or promote social inclusion. Socio-economically divided communities

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www.vichealth.vic.gov.au/~media/ProgramsandProjects/PlanningHealthyEnvironments/Attachments/built_environment
that concentrate low income or other disadvantaged groups are undesirable in that they entrench existing disadvantage, limiting people’s opportunities and access to resources, resulting in stigma and segregation, and placing an unfair burden on particular schools, health and social services. New development presents opportunities to create communities where people have a range of incomes, backgrounds and demographic characteristics, and where concentration of social disadvantage or isolation of vulnerable groups is minimised. Providing fair and equitable access to the community’s resources is a further way of promoting inclusive and harmonious development.

Related chapters of the checklist look more specifically at social infrastructure, public space, physical activity, employment and housing.

15.1.1 Relevance to NSW

Research shows that the social connectedness of individuals is related to lower mortality rates, lower rates of disease, better mental health and better self-rated health. More specific associations between social connectedness and health and well-being reported in the literature include200:

- Better recovery from serious illness
- Lower rates of chronic illness
- Lower suicide rates
- Lower rates of depression and anxiety
- Lower levels of stress related problems
- Less binge drinking
- Less violent crime.

While it is not clear how urban environments influence mental health, it seems that contact with other people avoids the damaging impacts of isolation and loneliness on human mental and physical health. Social connections also benefit health by ensuring help in a crisis, general social support and practical assistance. Socially cohesive communities also tend to support healthy behaviours and provide a sense of belonging and sense of community. Attachment to place has a significant association with mental health, for feelings of disconnection have been associated with mental illness, and the experience of dispossession or loss of place can have significant psychological impacts201.

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Research has also established clear links between social disadvantage and health outcomes\textsuperscript{202}. People of lower socio-economic status suffer higher rates of physical disease, mental illness, injury and premature death, and have a higher prevalence of health damaging behaviours and obesity. Clear links have been established between disadvantaged urban environments and poor health and mental health outcomes. Where socially disadvantaged groups are concentrated in disadvantaged neighbourhoods, these health outcomes are exacerbated by barriers to accessing the conditions that support health and well-being, such as access to education, employment, health and social services, affordable housing and transport\textsuperscript{203}.

15.1.2 Key evidence and leading practice

Research indicates that sense of community has significant positive impacts on a range of outcomes for individuals and groups, and that lack of connections, identity and supports can lead to less positive health outcomes\textsuperscript{204}. It reports that social epidemiologists have demonstrated that community connections, networks, and social cohesion play a significant role in the health, well-being, and mental health outcomes of a variety of populations and subgroups, including links with cardiovascular health, mental health, depression and rates of mortality and morbidity. “Sense of community can provide people with a buffer in times of stress, ill-health and uncertainty. Without meaningful social contact and positive social cohesion, both the individual and the group can flounder”. The study also reports on research that has demonstrated that physical characteristics of the built environment can facilitate the development of sense of community, through design that fosters social contact between neighbours.

Research has identified several major influences on mental health, including social connectedness, freedom from discrimination and violence and economic participation\textsuperscript{205}. It sees the presence of diverse, inclusive and tolerant communities as essential for fostering mental health. Social connectedness is promoted by fostering access to social networks, supportive environments and a variety of social and physical activities.

\textsuperscript{202} See footnote 199


In a study examining the relationship between the built environment and social cohesion, a positive relationship has been found between sense of community / attachment to place and perceptions of the attractiveness, quality and character of the built environment. This study also established a positive relationship between levels of neighbourhood social interaction and providing a well maintained and accessible public domain that provided high levels of natural surveillance and security\textsuperscript{206}.

Links between development that encourages walking and high levels of neighbourhood social interaction and sense of community have also been demonstrated in recent Queensland research\textsuperscript{207}. Those living in mixed use walkable neighbourhoods were also found to have higher levels of social capital in a study in Ireland\textsuperscript{208}.

Research has identified links between different forms of development and social cohesion. It has been found that there is more social capital in mixed-use communities than in single land use communities\textsuperscript{209} and there is a greater sense of community in the traditional neighbourhood than in the modern suburb\textsuperscript{210}. The most powerful explanatory variable was “perception of walking” – the better that people felt about walking in the neighbourhood, the higher their sense of community.

Research indicates that physical change in communities such as a new freeway or a rail line has a significant effect on the social fabric of a community\textsuperscript{211}.

Research has shown getting out and meeting people and establishing social contacts reduces the risk of stroke and depression and can help people live longer and be healthier physically and mentally\textsuperscript{212}.


Living in areas of concentrated social disadvantage results in physical and psychological deprivation, poor access to facilities and opportunities, higher disease rates and premature death. Mixed income neighbourhoods are linked to health benefits for disadvantaged groups\textsuperscript{213}. A Canadian study found in neighbourhoods of mixed income, the less affluent residents had better health and quality of life compared to those of similar income living in neighbourhoods with a concentration of less affluent people\textsuperscript{214}.

Several studies have found an association between characteristics of neighbourhoods and the built environment and mental health and depression\textsuperscript{215}. In a London study people living in disadvantaged neighbourhoods were more likely to report depression than peers living in less disadvantaged areas (identified in terms of substandard housing, crime, noise, poor amenity, and poor access to services and opportunities)\textsuperscript{216}. Neighbourhood features such as lack of resources, disorder and violence, inadequate housing and lack of green space may function as stressors, while other physical features affect social connections and levels of social support experienced by residents. Social support may in turn affect residents’ vulnerability to stress and depressive symptoms\textsuperscript{217}.

Sense of community has been found to be enhanced by urban planning that encourages visually diverse and attractive buildings, sufficient privacy, easy access to amenities and to town or neighbourhood centres, pedestrian friendly spaces, and streetscapes with houses that have views of the surrounding neighbourhood, open verandas and low fences in order to encourage social interaction\textsuperscript{218}.

In new developments where everyone is a stranger, it can take some time for social networks to develop and for community activities and organisations to be established. Leading practice recognises the need to stimulate and support “community building” in new neighbourhoods, by providing resources for community development workers and community development programs, in addition to providing facilities and public spaces for social interaction and community activities. Community development programs commonly provide welcome initiatives for new residents, set up community activities and support groups, establish local organisations and support community events that draw a range


\textsuperscript{214} See footnote 210


\textsuperscript{217} See footnote 216

of people together. Resources for community development may be provided by developers, local councils or government funding programs.

A fundamental principle of healthy communities is that residents have an opportunity to participate in decision-making, and to influence the planning and development of their community. Applying this principle means setting up mechanisms not only for new residents of the development to become involved, but also providing opportunities for the broader community to participate in the planning process. Community engagement processes may include public consultation at key milestones in the preparation of the planning proposal or policy, involvement in the design of important community resources such as community centres or parks, involvement in the creation of the public domain, such as tree planting, and involvement in running community events and organisations.

Creating a sense of place and identity for a new community that promotes civic pride and sense of belonging can be enhanced by cultural development and place-making initiatives, discussed in chapter 13 on public open space. Cultural development strategies can be an important tool for community participation and engagement.

The location of community services and facilities in ways that provide equitable access to all users and benefit a wide area, rather than just a local development, can promote integration with surrounding communities and enhance inclusion and social cohesion. Social integration and inclusion may be a challenge for Community Title developments if they do not allow public access through the site or to key facilities.

To minimise concentrations of disadvantaged groups, to promote more equitable access to resources and to enable essential service workers to live close to work, increasing the supply of housing which is affordable for low and moderate income households in areas with good access to employment, education and services is an important priority. Leading practice aims to increase the stock of affordable housing in new developments to help ensure communities contain some social mix. Current common practice in NSW is for 10-15% of dwellings in large new developments to be “affordable housing”, including social (public and community) housing, affordable rental housing and housing for purchase by low and moderate income households.

Key references including relevant standards and guidelines are included in the Further information section at the end of this chapter.
15.1.3 Key questions

How does the policy, plan or development proposal:

(SC1) Provide environments that will encourage social interaction and connection amongst people?

(SC2) Promote a sense of community and attachment to place?

(SC3) Encourage local involvement in planning and community life?

(SC4) Minimise social disadvantage and promote equitable access to resources?

(SC5) Avoid community severance, division or dislocation?

15.2 Social cohesion and social connectivity checklist questions

SC1: Provide environments that will encourage social interaction and connection amongst people

<table>
<thead>
<tr>
<th>Code</th>
<th>Question</th>
<th>Planning Policies and Strategies</th>
<th>Development Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC1.1</td>
<td>Does the policy, plan or proposal promote the creation of active mixed use centres or hubs that will provide a focal point for community interaction and identity (e.g. co-location of retail, commercial, civic and community uses)?</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.2</td>
<td>Does the policy, plan or proposal promote the creation of small scale neighbourhoods that facilitate social interaction and local identity?</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.3</td>
<td>Are arrangements in place for the timely provision of key community facilities that build social networks and support services, such as a community centre and primary school? (see chapter 14 on social infrastructure)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.4</td>
<td>Will the policy, plan or proposal provide venues for community and cultural events and activities that are conveniently located, accessible and easily reached by public transport? (refer to chapter 14 on social infrastructure)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Code</td>
<td>Question</td>
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<tr>
<td>SC1.5</td>
<td>Are attractive public spaces provided where people can meet, gather and socialise informally, such as parks with playgrounds or barbecue areas, plazas, cafes? (see chapter 13 on public space)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.6</td>
<td>Are shopping centres designed and placed to provide opportunities for social interaction and maximize neighbourhood activity?</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.7</td>
<td>Does the policy, plan or proposal encourage walking, through neighbourhood design and location of key destinations? (see chapter 8 on physical activity and chapter 10 on transport and connectivity)</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.8</td>
<td>Are resources provided for community development strategies that will initiate community activities and events and develop social support groups and community organisations?</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SC1.9</td>
<td><strong>URBAN FORM</strong>&lt;br&gt;Are communal areas provided within large housing developments?</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>SC1.10</td>
<td>Does the policy, plan or proposal provide for local employment options to enable people to work in their local communities and so minimise commuting times? (see chapter 11 on access to employment)</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>
### SC2: Promote a sense of community and attachment to place

<table>
<thead>
<tr>
<th>Code</th>
<th>Question</th>
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<th>Development Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC2.1</td>
<td>Does the policy, plan or proposal promote neighbourhoods and/or buildings with distinctive character that are likely to be perceived as attractive, quality development? (see chapter 13 on public space)</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
<tr>
<td>SC2.2</td>
<td>Does the policy, plan or proposal recognise and build on the site’s natural and cultural heritage? (see chapter 13 on public space)</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
<tr>
<td>SC2.3</td>
<td>Are public art or design features proposed that will encourage a sense of place? (see chapter 13 on public space)</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td></td>
</tr>
<tr>
<td>SC2.4</td>
<td>Is support provided for community or cultural development initiatives that will encourage a sense of belonging (such as a welcome program for new residents)?</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
</tbody>
</table>

### SC3: Encourage local involvement in planning and community life

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>SC3.1</td>
<td>Have local communities been consulted about the policy, plan or proposal?</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
<tr>
<td>SC3.2</td>
<td>Are there opportunities for community involvement in the implementation of the plan or delivery of the strategy (such as through community cultural development processes, involvement in design of public spaces)?</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
<tr>
<td>SC3.3</td>
<td>Does the policy, plan or proposal encourage opportunities for local involvement in community and civic life?</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
<tr>
<td>SC3.4</td>
<td>Has provision been made for community based projects such as community gardens or community involvement in running local services?</td>
<td><img src="Yes.png" alt="Yes" /></td>
<td><img src="Yes.png" alt="Yes" /></td>
</tr>
</tbody>
</table>
### SC4: Minimise social disadvantage and promote equitable access to resources

<table>
<thead>
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<th>Development Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC4.1</td>
<td>Does the policy, plan or proposal provide opportunities for improving levels of health equity within the area? Are existing health inequalities likely to be reduced? (refer to the 'understanding the community' section in chapter 6)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>SC4.2</td>
<td>Does the policy, plan or proposal exacerbate socio-economic divisions and is it likely to result in concentrations of socio-economically disadvantaged people?</td>
<td>● ●</td>
<td></td>
</tr>
<tr>
<td>SC4.3</td>
<td>Is social mix encouraged through housing diversity? (Refer to chapter 9 on housing) Does the plan or policy encourage inclusion and integration of a wide range of local demographic groups (e.g. lower socio-economic groups, culturally and linguistically diverse communities and Aboriginal and Torres Strait Islanders)?</td>
<td>●</td>
<td>● ●</td>
</tr>
<tr>
<td>SC4.4</td>
<td>Do vulnerable and disadvantaged groups (such as low income households, single parent families, unemployed people, recently arrived immigrants and refugees, Aboriginal and Torres Strait Islanders, people with a disability, older people) have fair and equitable access to services and facilities, employment opportunities and transport?</td>
<td>●</td>
<td>● ●</td>
</tr>
</tbody>
</table>

### SC5: Avoid community severance, division or dislocation

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>SC5.1</td>
<td>Are vulnerable or disadvantaged groups likely to be displaced or disadvantaged by the plan or proposal? If so, what strategies are proposed to minimise impacts and support individuals and groups?</td>
<td>●</td>
<td>● ●</td>
</tr>
</tbody>
</table>
| SC5.2| **URBAN FORM**  
Does the policy, plan or proposal promote physical integration with adjacent areas and existing development (through road connections, layout, open space network)? |                                  | ●                   |
SC5 continued

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>SC5.3</td>
<td>Are there any physical structures such as main roads, rail lines or industrial estates that will create barriers to movement and sever connectivity between communities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC5.4</td>
<td>Does the policy, plan or proposal encourage social integration across communities, for instance through provision of community facilities that can also benefit adjacent areas?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15.3 Further information

PCAL – Building Stronger Communities through Physical Activity: A Practitioner’s Resource

PCAL – Community Development Guidelines

Landcom – Social Sustainability Policy

CommunityBuilders NSW
www.communitybuilders.nsw.gov.au

VicHealth – Social Connections

Social Connections Complete Health Picture
www.cfah.org/hsnews/social04-29-04.cfm

Road to Well-Being: City of Social Connection
www.roadtowellbeing.ca/connection.html

CommunityNet
www.cnet.ngo.net.au