Appendix I: Review of Peel Healthy Development Index Core Elements

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Introduction

1.1 Project Overview
As a collaborative effort between the Region of Peel and the City of Toronto, the purpose of this project is to build on the Peel Healthy Development Index and explore the possibility of establishing a context-sensitive system requiring consideration of health impacts during the land use development approvals process. One step in this process will involve the development of a Health Background Study Framework whereby development proponents are accountable for identifying health related risks that might arise from their developments. This system will provide the flexibility to address context-specific constraints or opportunities and will create criteria by which to require and evaluate these studies.

1.2 Purpose of this Report
This report addresses the formative stages of the Health Background Study Framework project, including the establishment of a set of criteria to inform the Framework, an initial discussion of where the Study should be inserted in the development application process, and what scale of development it should deal with.

To inform the development of this Framework, this report examines how the linkage between public health and land use planning is currently treated in policy and programs at the provincial, regional and local level, with a particular focus on the Region of Peel and the City of Toronto. In addition to planning policies and health-related initiatives such as Health Impact Assessments, this report includes an examination of studies that are already required as part of the municipal development process, and a summary of stakeholder interviews with regional and local planners, public health professionals and developers. Recommendations for a Health Background Study Framework that builds on the Peel Healthy Development Index conclude this report.

1.3 The Built Environment and Public Health – Past, Present and Future
Over the past century, our understanding of the complex interactions between our health and the environment in which we live have become increasingly apparent. Notwithstanding that recognition, it has not been until the last several decades that research has been able to provide evidence of these connections. The evolution of the public health profession in North America has, in large part, been about the associations between health and the built and physical environment.

The growing awareness of the associations between health and the built environment has corresponded with a measurable shift in the burden of illness, from communicable diseases to chronic diseases. While public health once focused on controlling and preventing communicable diseases caused by overcrowding, poor sanitation systems, and poor food preparation/storage practices, these sorts of issues have been largely resolved in the developed world. The majority of the burden of disease in industrialized societies is now made up of chronic illness, as reflected in some of the current research findings outlined below:

- Cancer is the leading cause of premature death in Canada. 40% of women and 45% of men will develop cancer in their lifetime. An estimated 50% of cancers are preventable (Canadian Cancer Society 2010). Obesity is a risk factor for a number of cancers - breast, colon, endometrial, esophageal, and kidney (Canadian Partnership Against Cancer 2008).

- Cardiovascular disease (CDV) is the leading cause of hospitalization in Canada, and drug costs in Canada. CVD is responsible for an estimated cost of $22 billion per year in direct healthcare costs and lost productivity in Canada. 80% of CVD is preventable (Heart & Stroke Foundation of Canada 2010).

- In Canada more than 3 million people have diabetes, and this is expected to rise to 3.7 million by 2020. Canadian adults with diabetes are twice as likely to die prematurely compared with the rest of the population. By 2020 it’s estimated that diabetes
will cost the Canadian healthcare system $16.9 billion per year (Canadian Diabetes Association 2010).

Much of this is preventable through healthy eating, not smoking, getting adequate physical activity, and not becoming obese – activities that are influenced by the built environment (with the exception of smoking).

In addition to specific connections to chronic illness, the built environment is also recognized for its influence on more general key determinants of health. The list of key determinants of health vary among agencies and between jurisdictions, but they are consistently defined by their relevance for improving or influencing the health status of a population – an end goal that requires all health determinants of health to be considered within strategies that address specific health conditions or risks. Of the 12 key determinants of health identified by the Public Health Agency of Canada (Table 1), three have particular relevance to the development of a Health Background Study Framework: social environments, physical environments, and health services.

Given that there is a role for those involved in building our communities to integrate health considerations, land use decisions and the way communities are designed have multiple impacts on people lives, from how they get around to how they interact with their neighbours. The physical form of a community can impact its vitality, define its character and shape its ability to attract business and residents. It can also affect the overall physical and mental health of the people who live there.

Research has shown that the physical form and development patterns of a community have significant impact on a wide range of elements, including, but not limited to, air pollutants and greenhouse gases, water quality, levels of physical activity, social cohesion and rates of crime, and rates of injuries and fatalities for motorists, pedestrians and cyclists. While these elements may seem disparate, they all have direct impacts on our health.

Table 1 - Key Determinants of Health

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income and Social Status</td>
<td>Income and social status influence people’s access to housing and food, and their sense of control over life decisions. Health status generally improves as people’s income and social status improve.</td>
</tr>
<tr>
<td>Social Support Networks</td>
<td>Support from family, friends and the community contribute to better health.</td>
</tr>
<tr>
<td>Education and Literacy</td>
<td>People’s level of education influences their opportunities for job selection and security, and a sufficient income. Enhanced education and literacy contribute to better health.</td>
</tr>
<tr>
<td>Employment/ Working Conditions</td>
<td>People with a steady job that provides sufficient income and safe workplaces are generally healthier.</td>
</tr>
<tr>
<td>Social Environments</td>
<td>Social stability, recognition of diversity, good working relationships and cohesive communities contribute to healthy social environments, and healthier people.</td>
</tr>
<tr>
<td>Physical Environments</td>
<td>The natural environment, which includes air, water and soil, influences health. A cleaner environment supports better health. The human-built environment, which includes housing, workplaces and road design, also influences health. A better-designed community can result in improved public health.</td>
</tr>
<tr>
<td>Personal Health Practices and Coping Skills</td>
<td>People’s knowledge, behaviours and abilities to handle outside influences and stressors affect health. Enhanced personal health practices and coping skills improves health.</td>
</tr>
<tr>
<td>Healthy Child Development</td>
<td>Early child development influences health throughout the life span. Factors that influence healthy child development include appropriate birth weights, positive parenting and safe, friendly neighbourhoods.</td>
</tr>
<tr>
<td>Biology and Genetic Endowment</td>
<td>People’s genetic endowment contributes to their predisposition to certain diseases. Biology influences their response to sources of stress, such as viruses or emotional strain.</td>
</tr>
<tr>
<td>Health Services</td>
<td>Health is influenced by having access to services that are structured to restore, maintain and promote health, and prevent disease. Better access to health services improves health.</td>
</tr>
</tbody>
</table>

2.1 Introduction
A number of recent policy initiatives at the provincial, regional and local levels recognize the link between the public’s health and development decisions. These policy initiatives acknowledge that as municipalities become increasingly built-out, careful attention must be given to the effect of new development on the overall health of community populations. To ensure the consideration of community health throughout the planning and development process, these Provincial policies address land use, development and growth planning in Ontario in a way that has effectively transformed the Provincial planning policy regime.

The key policy initiatives include recent regulatory changes under the Planning Act, and two policy documents that provide clear direction on the creation of healthy and complete communities – the Provincial Policy Statement (2005), and Places to Grow: The Growth Plan for the Greater Golden Horseshoe (2006). The Regional Transportation Plan (2008) complements these last two policy documents with a vision for “Transforming Transportation in the Greater Toronto and Hamilton Area” towards a more sustainable and healthy model. The underlying principles within these policies are supportive of a municipal vision that addresses several public health concepts.

2.2 The Planning Act (Bill 51)
Under recent amendments to the Planning Act (implemented under Bill 51), municipalities have increased powers to establish requirements for complete development applications. These amendments enable municipalities to require an applicant to provide supporting studies and information required to make an informed decision about the proposed development at the time a planning application is made.

In addition to establishing prescribed minimum complete application requirements, the amended Planning Act (Sections 22(5), 34(10.2), and 51(18)) now empowers municipalities to identify “any other information or material” required beyond the prescribed minimum, so long as such information and/or study requirements are supported by enabling policies within a municipality’s Official Plan. As part of their current Official Plan Review, some municipalities in Peel have included health-related studies in their lists of potential steps that may be required in the consideration of a development application (which may be an Official Plan Amendment, Zoning By-law Amendment, Plan of Subdivision/Condominium, Consent or Site Plan Control).

2.3 Provincial Policy Statement (2005)
The Provincial Policy Statement (PPS) provides broad policy direction to municipalities on matters of Provincial interest related to land use planning and development. The PPS supports good land use planning, which in turn, contributes to a more effective and efficient land use planning system.

The PPS is premised on the understanding that the long-term prosperity and the well being of Ontario is dependent on the development and maintenance of strong, healthy, active, livable and safe communities. The following excerpts highlight some of the linkages drawn between development and health:

Healthy, active communities should be promoted by:…
b. providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, open space areas, trails and, where practical, water-based resources. (Section 1.5.1)

Healthy, liveable and safe communities are sustained by: …
ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs. (Section 1.1.1)

Healthy, liveable and safe communities are sustained by:
b. accommodating an appropriate range and mix of residential, employment (including industrial, commercial and institutional uses), recreational and open space uses to meet long term needs. (Section 1.1.1)
Throughout, a strong connection is made between the health of a community and the provision of a complete mix of land uses, services and infrastructure.


Building on the broad directives of the Provincial Policy Statement, Places to Grow provides the framework for implementing the Province’s vision for building stronger, prosperous communities by better managing growth throughout the Greater Golden Horseshoe to the year 2031.

The vision of Places to Grow is articulated through a number of guiding principles. These guiding principles, found in Section 1.2.2 of Places to Grow, are intended to provide the basis for making decisions on how land is developed, resources are managed and public dollars are invested. The guiding principles of the vision articulated in Places to Grow are as follows:

- Build compact, vibrant and complete communities.
- Plan and manage growth to support a strong and competitive economy.
- Protect, conserve, enhance and wisely use the valuable natural resources of land, air and water for current and future generations.
- Optimize the use of existing and new infrastructure to support growth in a compact, efficient form.
- Provide for different approaches to managing growth that recognize the diversity of communities in the GGH.
- Promote collaboration among all sectors - government, private and non-profit - and residents to achieve the vision.

While public health outcomes are not an explicit aim of Places to Grow, there are clear linkages between its guiding principles and community health. Generally, building compact communities increases opportunities for active modes of transportation by bringing destinations in closer (walkable) proximity to one another, which also creates the necessary demand for public transit. Building communities that are more compact also protects land and resources outside of the community, which helps maintain clean air and water, and local sources of fresh food.

2.5 The Regional Transportation Plan (2008)

The purpose of the Regional Transportation Plan (RTP) is to implement the transportation component of Places to Grow. The RTP is premised on a shift away from private automobile use and towards the use of public transit and active modes of travel (i.e. walking and bicycling). Although the RTP focuses on the economic and environmental imperatives for this shift, the connection to public health outcomes is clearly outlined, particularly in terms of the link between how we travel and obesity, as well as the health impacts of transportation-related air pollution.

The RTP outlines nine “Big Moves” and 10 strategies to achieve those “Moves”. Of particular relevance to public health are strategies 1, 2, 7 and 8:

- Strategy #1 Build a Comprehensive Regional Rapid Transit Network
- Strategy #2 Enhance and Expand Active Transportation
- Strategy #7 Build Communities that are Pedestrian, Cycling and Transit-Supportive
- Strategy #8 Plan For Universal Access

The connection between transportation, community development, and community health is most clearly outlined in the policies related to Strategy #7, which focus on the connection between healthy transportation options and land use.

2.6 Summary of Findings

New Provincial policy, as articulated in the Planning Act, the Provincial Policy Statement, Places to Grow, and the Regional Transportation Plan is fundamentally aimed at establishing the principles of good planning throughout Ontario, with, in some instances, specific focus on the Greater Golden Horseshoe. Some of those fundamental principles supported by Provincial Policy include:

- Conservation of all significant natural heritage features;
- Promotion of a mix of uses, at increased densities;
- Support for transit, and a reduction on automobile reliance;
- Creation of complete communities with places to live, work, shop, play and be educated in proximity to each other.

These principles inherently can promote improved public health outcomes. The current Planning Act gives municipalities the ability to make a direct connection between urban development and public health.

Based on a review of the Provincial policies, the following is a summary of specific land use, built form and environmental elements, as identified in provincial policy, which have pertinence to health outcomes.
General Goals

- Protect Sensitive Land Uses:
  - Mitigate nuisance impacts such as odours, noise and contaminants with buffers/separation.

- Protect Water
  - Where necessary, restrict development and site alteration with an aim to protect, improve, restore water quantity and quality.

- Minimize Impacts on Air Quality
  - Promote public transit and active modes of travel.
  - Promote energy efficiency and use of alternative forms of energy.

- Sustain Local Agriculture
  - Promote and protect local agricultural resources and minimizing land use conflicts.

Element-specific Goals

- Recreation
  - Provide accessible built and natural settings for facilities such as parklands, open spaces, trails, water-based resources

- Transportation
  - Design public streets to be safe spaces that meet the needs of pedestrians, and to facilitate non-motorized modes of transportation.
  - Facilitate the movement of people and goods.
  - Reduce dependency on automobiles.
  - Promote active transportation modes.
  - Promote connectivity within and among transportation systems.

- Land Use Patterns
  - Support land use patterns that include higher densities and mixed-uses, and that make efficient use of public infrastructure.

- Housing
  - Provide a range of housing types and densities.
  - Establish targets for affordability.
  - Require development to meet social, health and well-being needs of current and future residents, including residents with special needs.
  - Direct development to areas with appropriate infrastructure and public services.
  - Build at densities that efficiently use land and support alternative transportation and transit.
  - Develop standards for intensification that minimize the cost of housing and promote compact form, healthy living and safety.

The policy elements highlighted here are informative for developing theme-based criteria for a Health Background Study.
3.1 Introduction
Echoing the broad policy directives at the Provincial level, recent policy initiatives at the local level demonstrate increasing support for using available planning and development mechanisms to achieve healthy community development objectives.

As part of this Situational Assessment, a number of planning and health-related policy and research documents were reviewed. The purpose of this review was to understand the respective policy contexts within the Region of Peel and the City of Toronto related to the potential implementation of a Health Background Study requirement and to examine methods, strategies and policy support that could inform the development of a Health Background Study Framework.

3.2 What is the Region of Peel doing?
The Region of Peel, through its Official Plan, Public Health 10-Year Strategic Plan and Peel Healthy Development Index has demonstrated a clear commitment improving public health through the planning and development process.

3.2.1 Region of Peel Official Plan
The Region of Peel outlines clearly in its updated Official Plan support for an assessment tool which allows the evaluation of public health impacts of a proposed plan or development, as part of the approval process (ROP A 24, Section 7.9.2.9, and ROP A 25, Section 7.3.6.2.2).

Further, the Region, through its updated Official Plan has committed to collaborating with the area municipalities on the development of this tool and its indicators. The Official Plan commits the Region to raise awareness of public health issues related to planning through partnerships within all levels of the public and private sector (Section 7.9.2.10).

3.2.2 Peel Active Transportation Study
The Region of Peel is working with the local municipalities of Mississauga, Brampton and Caledon on an Active Transportation Study that is focused on improving conditions for pedestrians and cyclists across the Region. The Study will produce a Regional vision for active transportation, with recommendations for: policies and guidelines that support that vision; an integrated pedestrian and cycling network and related facilities; and implementation strategies, including a phasing schedule. The Study is expected to be completed in Fall 2011.

3.2.3 The Peel Public Health 10-Year Strategic Plan
Further reflecting the Region’s commitment to health promotion, the Peel Public Health Department 10-Year Strategic Plan establishes a primary health vision and principles for the Region. Grounded in the ‘Public Health Way’, this set of principles acts to clarify the direction the Region wishes to take in regards to public health and the promotion of a healthier population. This strategy specifically highlights benefits to the population as a whole, rather than individuals.

Additionally, the Strategic Plan places considerable emphasis on prevention rather than treatment. This emphasis undoubtedly will inform the development of a Health Background Study which allows planning activities to have a greater role in shaping aspects of the built environment, and policy that promotes activities that are preventative in nature. One of the Plan’s four program priorities is entitled “Supportive Environments, Healthy Weights” and specifically states that policies will be developed at the Regional level to promote healthier built environments.
3.2.4 Peel Healthy Development Index

Augmenting the Region’s updated Official Plan policies and its Public Health Strategic Plan, the Peel Healthy Development Index supports an evidence-based tool that will encourage future development in a form more conducive to active living. Elements and associated measures are identified that are directly related to health and the built environment. The Elements and their connection to health were derived from evidence in scientific literature, and include:

- Density
- Service Proximity
- Land Use Mix
- Street Connectivity
- Road Network and Sidewalk Characteristics
- Parking
- Aesthetics and Human Scale.

On the whole, the Peel Healthy Development Index provides a wealth of information to be considered in the development of a framework to promote a healthy population through appropriate land use planning activities. Of particular importance are the establishment of context-specific criteria and the need to link these criteria and targets both within and between regional and local municipalities.

3.2.4.1 Core Element Review

Since the Healthy Development Index has been identified as a central building block towards developing a Health Background Study Framework, the purpose of this section is to outline the key findings of our detailed review of all seven Core Elements. Our review focused on the feasibility of using these Elements as the basis for the Health Background Study Framework, and the full assessment can be found in Appendix I. In brief, the review looked at the following:

- typical standards/measures for each Element (e.g. for Density, a typical measure would be “the number of people and jobs per net hectare”, or floor area ratio (FAR));
- whether the element is under the influence of planners/the planning regime;
- if there is a practical way of assessing the Element within a development proposal; and
- whether its reasonable to expect developers to address the Element in their proposed development.

The review revealed that the seven Core Elements as defined by the Peel Healthy Development Index have clear connections to existing planning policy and development approvals. In a general sense, all Core Elements are already being addressed in existing planning policy, although the standards in existing policy may not be up to the optimal standards for achieving desired health outcomes. All the Core Elements also have accepted methods of measurement (qualitative and quantitative) associated with them, which developers must demonstrate adherence to through existing planning approvals mechanisms.

As a result, the feasibility of using these elements as the basis of a Health Background Study is not in question. What is in question is how policy and standards around these elements can be strengthened to meet desired health outcomes. This raises deeper questions with respect to defining what standards/performance measures are achievable, and in turn, whether specific standards/performance measures should be mandated and others voluntary.

Finally, while the Peel Healthy Development Index provides a very comprehensive analysis of how elements of the built environment may be addressed in regards to public health, there are other areas that relate to environmental quality (air, water, noise, vibration, odour) mental health, access to healthcare, safety concerns and cultural considerations that may also be considered in the creation of a Health Background Study Framework.

3.3 What is the City of Mississauga doing?

The City of Mississauga is undertaking a number of initiatives regarding development, active transportation, and environmental sustainability – all of which are relevant to the development of healthy communities. The initiatives include the Mississauga Official Plan, Cycling Master Plan, Green Development Strategy, and Living Green Master Plan.

3.3.1 Official Plan

The Mississauga Official Plan builds on the directives of the updated Region of Peel Official Plan, and is committed to raising awareness of the link between the built environment and public health. This is supported by the potential requirement of a Health Impact Study associated with development proposals as part of a complete application submission, as proposed in the current draft Mississauga Official Plan.

3.3.2 Cycling Master Plan

Mississauga approved its first Cycling Master Plan\(^4\) in September 2010. The Plan outlines a strategy to develop
over 900 kilometres of on and off-road cycling routes in the city over the next 20 years. The Plan takes an integrated multi-modal approach to transportation planning, and when fully implemented it will put 95 per cent of the city’s population within one kilometre of a primary cycling route. The Cycling Master Plan is relevant to any components of a future Health Background Study that address active transportation.

3.3.3 Green Development Strategy

In July 2010, Mississauga adopted a Green Development Strategy\(^5\) that “focuses on achieving sustainability and environmental responsibility in new development”. The Strategy calls for the implementation of a Task Force, a request for new development applications to voluntarily achieve LEED for New Construction Silver certification and “Stage One Green Development Standards”. The Stage One Standards address stormwater management, pedestrian and cycling comfort, and bird-friendly glazing on the exterior of buildings.

Although the Strategy and associated standards are focused on environmental impacts, it has relevance for a future Health Background Study. The Stage One Standards address water quality and opportunities for active transportation, which are both relevant to health. Standards that are added in subsequent stages may also be relevant to the health impacts of development.

3.3.4 Living Green Master Plan

The City of Mississauga is also currently developing a Living Green Master Plan that will outline the city’s strategic environmental goals and provide direction for the City’s policies, practices and operations. The plan will also identify roles for residents, community groups, corporations and other partners.

Although the Plan is focused on environmental sustainability, its key areas of focus (air, climate change, energy, land, transportation, waste and water) impact health directly. The concurrent development of a Living Green Master Plan and the Health Background Study Framework should provide opportunities for the two documents to inform one another.

3.4 What is the City of Brampton doing?

The City of Brampton has responded to provincial planning initiatives and regional directives with updates to its Official Plan policies and the Transportation and Transit Master Plan. Healthy development is also supported by the City’s existing PathWays Plan and the development of a Sustainable Plan and Environmental Master Plan. These two documents focus on the environment, but have the potential to address health outcomes.

3.4.1 Official Plan

The Brampton Official Plan, while not explicitly establishing directives for the implementation of a public health impact evaluative tool, highlights a variety of policies related to public health, its promotion, and the role of the built environment. These health-related policies address the Sustainable City Concept, residential communities, the transportation system and demand management measures, public transit, parking management and the pathways system. The Official Plan policies generally establish direction for the implementation of Sustainable Community Design Guidelines, which are currently being developed as part of the City’s Sustainable Plan. While the Sustainable Community Design Guidelines will not directly address health, there may be potential overlap with standards developed for the Health Background Study.

Notably, the Official Plan strives to develop land use patterns that do not pose a risk to public health and safety, as opposed to a more positive approach that would develop land use patterns that enhance public health and safety.

3.4.2 Transportation and Transit Master Plan (TTMP) Sustainable Update 2009

The 2004 Brampton TTMP recently underwent a “Sustainable Update” that brings the original Master Plan up-to-date with new planning initiatives at the provincial level, recent growth trends, and changes to the city’s development charge by-law. The TTMP Sustainable Update builds on the 2004 vision regarding sustainable development, protection of the natural environment, economic vitality, and healthy communities, with a focus on providing safe, affordable, and efficient transportation for people and goods. The TTMP promotes active transportation facilities for recreational and commuting use, and supports the implementation of the PathWays Master Plan for a network of mostly off-road trails.


\(^4\) For more information on the City of Mississauga Cycling Master Plan, visit the project website at: http://www.mississauga.ca/portal/residents/mississaugacyclingplan
3.4.3 Pathways Master Plan 2002

The PathWays Master Plan outlines a pathways network of 500 km of proposed on- and off-road trails, with the goal of connecting all residents to neighbourhood, community and city-wide destinations. In support of the PathWays Master Plan, the City endorsed draft trail design guidelines entitled Pathways Hierarchy (2008), which are used to determine the type and location of trails at the block planning phase. The hierarchy is also used by the City when constructing new pathways in existing communities.

In addition, the City will be preparing an Implementation Plan for Bicycle Facilities for on-road bikeways. The Plan will outline a strategic approach to implementing on-road trails, including making use of the development review process to identify new opportunities.

3.5 What is the Town of Caledon doing?

The Caledon Official Plan supports the Region in its goal of evaluating public health impacts of development, and the role of public health in achieving complete communities. The Official Plan highlights the relationship between community design and public health and the Town’s intention to work with the Region and other local municipal counterparts to develop a tool for evaluating the public health impacts of development proposals as part of the approval process. The Plan also expresses the Town’s intention to raise awareness of public health issues related to planning through partnerships with the public and private sectors.

3.6 What is the City of Toronto doing?

3.6.1 Official Plan

Similar to Provincial directives, the Toronto Official Plan supports the evolution of the city as a healthy and attractive place to live and work. While the Toronto Official Plan does not establish specific policies related to public health outcomes, it does recognize the linkage between planning and healthy communities in a broad sense with a number of references related to health, including the promotion of healthy active neighbourhoods, access to healthy food, supporting recreation opportunities through a comprehensive parks and open spaces system, preservation of the natural environment and ensuring the provision of appropriate and accessible community services and facilities.

3.6.2 Toward a Healthy City – Strategic Plan 2005-2009

Toward a Healthy City is the City's most current public health strategic plan. The plan establishes a vision for public health in the City and includes a set of guiding principles and a series of strategic directions for the delivery of public health services in the City. The overarching mission of the plan is to improve the health of the City’s population and reduce health inequalities. While the plan does not draw an explicit linkage to built form or community design as a determinant of health, it does establish a broad framework that supports the integration of health-related public policy into the City's wider programs and initiatives.

3.6.3 Toronto Bike Plan

The City of Toronto adopted a Bike Plan in 2001 that proposes a 1,000 kilometre bikeway network that is within a 5-minute bicycle ride of all residents. The Bike Plan also includes policies for bicycle friendly streets, safety and education, promotion, cycling and transit, and bicycle parking. The City has made progress on all fronts including the implementation of hundreds of kilometers of bikeways and the inclusion of a bicycle parking requirement in its new Zoning Bylaw. The Bike Plan is relevant to any components of a future Health Background Study that address cycling for transportation or recreation.

3.6.4 Toronto Walking Strategy

The City of Toronto adopted a Walking Strategy in 2009 that builds on the 2002 Pedestrian Charter. The Strategy includes six steps towards building a physical and cultural environment that supports and encourages walking. The six steps relate to leadership, promotion, integrated networks for walking, street design, creating spaces and places for people, and focusing on priority and tower renewal neighbourhoods. The Walking Strategy is relevant to any components of a future Health Background Study that address pedestrian-friendly streets and development.

3.6.5 Toronto Green Standard

The Toronto Green Standard is a set of performance measures with supporting guidelines related to sustainable site and building design for new development. Official Plan policy has enabled many components of the Toronto Green Standard to become formal requirements that developments must now satisfy.
Although not explicitly focused on health impacts, several aspects of the Standard make it a useful structure to inform the development of a Health Background Study Framework, and to define key evaluation criteria. The admirable characteristics of the Standard include:

- the use of mandatory and voluntary measures and incentives,
- clearly defined environmental drivers,
- practical implementation principles, and
- a simplified reporting structure.

Because of the particular applicability of the Standard to the development a Health Background Study Framework, the characteristics of the Standard are outlined in more detail in Table 2. Of particular relevance is the use of combined mandatory and voluntary performance measures, the latter of which are promoted through a financial incentive. This two-tiered framework of mandatory and voluntary performance measures may be an avenue worth exploring in the development of a Health Background Study Framework.

In addition, the simplified reporting structure, i.e. the Toronto Green Standard Checklist, may serve as a functional submission template for a health-related study requirement that is part of the development approvals process. The Checklist requires applicants to describe how each performance measure is being met in a simple matrix. Not only is the template relatively simple for applicants to complete, it also facilitates the timely review by the approving jurisdiction.

### 3.6.6 Toronto Health Impact Assessment

The focus of the Health Impact Assessment (HIA) is to assess the impacts of a proposed policy or project on the determinants of health. Compared to the Green Development Standard, which can be applied uniformly to development projects, the HIA begins with a uniform review process to determine whether a full scale study is needed, and if so provides the framework for developing an individualized approach to fulfilling that study. Further, the HIA can apply to policies or projects of various types, although it is most relevant for large-scale developments rather than smaller scale forms of development and individual applications. The advantages of the HIA process are that it provides a systematic way to address both positive and negative impacts of a proposal, and allows for recommendations based on process-based evaluation of the evidence.

Although the HIA model ultimately may not be transferable to the Health Background Study, elements of each step in the HIA process can inform the development of a Health Background Study Framework. The four steps in the HIA process are:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory measures</td>
<td>Required as a condition of development approval.</td>
</tr>
<tr>
<td>Voluntary measures</td>
<td>More stringent performance measures that are encouraged through incentives, such as eligibility for up to a 20% reduction in applicable development charges.</td>
</tr>
</tbody>
</table>
| Environmental drivers| Better air quality  
                        | Reduced greenhouse gas emissions and urban heat island effects  
                        | Greater energy efficiency  
                        | Improved water quality and water efficiency  
                        | Less solid waste  
                        | Protection of the urban forest and wildlife habitat  
                        | Reduced light pollution |
| Implementation principles | Measurable, e.g. plant shade trees to provide a 20% canopy at maturity.  
                        | Performance-based to allow for flexibility and innovation, e.g. achieve 25% energy savings above the Model National Energy Code.  
                        | Focused on the design and construction of the built form (not on building operations or workplace programs that could also influence environmental performance).  
                        | User friendly.  
                        | Set standards high enough to raise the bar on environmental performance, but still allow for green competition amongst developers. |
| Social Environments  | Social stability, recognition of diversity, good working relationships and cohesive communities contribute to healthy social environments, and healthier people. |
### Table 3 - The Four-Stage HIA Process

#### Step 1: Screening

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Tools</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish: Whether there is a potential impact on health.</td>
<td>A two-part sequential series of questions and checklists that guide the respondent through the process:</td>
<td>Final report that includes:</td>
</tr>
<tr>
<td>• What segments of the population could be affected.</td>
<td>Part A clarifies the importance of the proposal, which groups it might affect, and potential health impacts.</td>
<td>• A description of the proposal;</td>
</tr>
<tr>
<td>• The likely direction and scale of the potential impacts.</td>
<td>Part B summarizes Part A responses, and establishes the need for further appraisal and next steps.</td>
<td>• Population affected by the proposal;</td>
</tr>
<tr>
<td>• The need for a more detailed assessment.</td>
<td></td>
<td>• Potential impacts on detriments of health; and,</td>
</tr>
<tr>
<td>• Whether HIA is the most effective way to address potential health impacts.</td>
<td></td>
<td>• A basis for decision and a final recommendation.</td>
</tr>
</tbody>
</table>

#### Outcome of Step 1:

A) Further health appraisal  
B) No further appraisal because health impacts are negligible.  
C) No further health appraisal because health impacts are well known.

#### Step 2: Scoping

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Tools</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Select a Steering Committee.</td>
<td>Limited Scope Assessment Tool (Health Lens) – assesses key impacts and then assesses the scale and importance of those impacts.</td>
<td>Terms of Reference (Assessment Plan)</td>
</tr>
<tr>
<td>• Develop the Terms of Reference (Assessment Plan).</td>
<td>In-Depth Assessment Tool (Health Appraisal Tool) – identifies key health impacts, collects data, assess the scale and importance of impacts.</td>
<td></td>
</tr>
<tr>
<td>• Determine the depth and scope of the HIA required.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Step 3: Assessment

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Tools</th>
<th>Deliverables</th>
</tr>
</thead>
</table>
| • Work through an Assessment Tool to identify and describe potential impacts. | • Community profiling  
• Collection of baseline environmental data  
• Policy analysis  
• Literature review  
• Professional bodies  
• Post secondary and senior practitioners  
• Participatory qualitative methods  
• Quantitative methods | • Results of Assessment  
• Recommendations |
| • Assess the significance of health impacts using the assessment matrix. |                                                                      |                                                                              |
| • Report results and formulate recommendations.                      |                                                                      |                                                                              |

#### Step 4: Monitoring and evaluation of the process

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Tool(s)</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individualized approach to be determined in the Recommendations.</td>
<td>Generally, monitoring should assess whether the anticipated positive impacts were enhanced and whether the negative impacts were minimized.</td>
</tr>
</tbody>
</table>
1. Screening: Determine if a full scale assessment is warranted based on key questions, checklists and a report.
2. Scoping: Create a blueprint for the assessment in collaboration with stakeholders.
3. Assessment: Complete a detailed, evidence-based assessment and describe the potential nature and magnitude of impacts.
4. Reporting, monitoring and evaluation. These steps are further outlined in Table 3. Given the potential applicability of the HIA to the Health Background Study Framework, a detailed analysis is provided in sections 3.6.6.1 to 3.6.6.4, which highlight key components of the HIA steps, and how they might be applied to the Health Background Study Framework.

### 3.6.6.1 Step 1: Screening

During the screening step of the HIA, a two-part sequential series of questions and checklists are used to guide the applicant through the process and give insight into the scope and impact of a project in regards to impacts on public health. A similar tool could be used during the pre-consultation process of a development project when developers meet with planning staff. Key considerations outlined in the screening step could be used by the planning professional to inform analysis and recommendations. The screening tool would not necessarily need to be completed by the applicant (though the preliminary checklist and questions may aid the applicant in understanding health impacts), instead the planning professional may take the questions and components of this tool into consideration when assessing proposal for a Health Background Study requirement.

### 3.6.6.2 Step 2: Scoping

At step two, the scoping stage, a blueprint for the assessment is developed in consultation with stakeholder groups of different backgrounds. While valuable in large-scale developments, this may be less essential and likely not feasible for smaller scale forms of development and individual development applications. Development of a certain magnitude, assessed in the screening and in this scoping stage, could be recommended for a more intensive review.

### 3.6.6.3 Step 3: Assessment

The assessment stage of the Toronto HIA framework report describes the potential health impacts of the proposed policy or project, their impacts on health determinants, and the potential nature and magnitude of those impacts. This step includes the application of a variety of data collection methods (identified in Table 3), and no one method is considered best. As indicated in the HIA report, the selection of methods will likely depend on funds, the nature and scope of the project or policy and the time available.

If applied to private development the assessment stage would generally fall into the domain of the applicant as part of the development submission, and would rely on their resources and understanding to complete. Although the HIA report is not typically circulated for peer review, this additional step could be considered within a Health Background Study Framework.

### 3.6.6.4 Step 4: Monitoring and evaluation of the process

Additional steps, such as monitoring, evaluation and public consultation are identified as important features in the Toronto HIA report. In the context of development projects, the assessment of the actual impact on health is often difficult to do, due to the cost of long-term follow-up and the limitation of the data that can be collected and analyzed. Additionally the resources and time required for public consultation does not justify this requirement for all developments. Consultation resources should be reserved for more significant master plan and Secondary Plan projects. However, health information for all development applications could be made publically available.

Monitoring, while perhaps not required for each development, would be best served as an assessment of the process, and could be conducted by the municipality over a pre-designated time period to review outcomes and adjust requirements.
3.7 Summary of Findings

It is clear from the review of the current policy documents and health related planning initiatives in the Region of Peel and in the City of Toronto that there is a clear recognition of the link between urban development/design and positive public health outcomes.

The following elements are drawn from the various Peel and Toronto policy documents and may be used to inform the goals and criteria of a Health Background Study Framework:

• Support active, healthy communities through compact built form and mixed use development that integrates residential, community and recreational land uses.
• Promote active transportation (walking and cycling) and public transit, and design streets to facilitate these modes of transportation.
• Promote incidental and recreational activity by providing a comprehensive parks and open space system.
• Protect the natural environment, public health and safety, the provision of educational, health and transportation services and facilities.
• Mitigate impacts on air and water quality and quantity.
• Protect and provide access to healthy food.

In addition to providing insight into the goals and substance of the Health Background Study Framework, the Peel and Toronto policies and programs include transferable elements to inform the structure of the Health Background Study. Within Peel, the most significant document is the Peel Healthy Development Index, which provides a means of measurement for a comprehensive range of health-related variables. In Toronto, the Green Development Standard, while not specifically related to health, provides a template for evaluating the quality of proposed developments. On the other hand, the Toronto Health Impact Assessment offers a step-by-step approach to considering community health impacts. These documents will provide an excellent background to begin to make the choices necessary in the development of a Health Background Study Framework.

From the Toronto Green Standard experience, we are provided with ‘principles’ for the establishment of standards. These ‘principles’ with appropriate adjustment, should form the basis for considering criteria within a Health Background Study. For example, criteria should be:

• Measurable
• Performance-oriented
• Focused on the design and construction of the built form;
• User-friendly; and,
• Set high enough to raise the bar on performance, without creating an undue, adverse impact on competitiveness.

The Toronto Health Impact Assessment provides a comprehensive individualized process, and while this framework may not be applicable to all development types, such as smaller scale/ individual development applications, it provides criteria and methods for consideration in the development of a Health Background Study Framework.

The screening and scoping stages could fit in with current pre-consultation processes, where study requirements associated with a development application are determined. The assessment stage could be used to inform the terms of reference for a Health Background Study, but would likely need to be scoped appropriately for individual development applications. Notwithstanding, the Limited and In-Depth assessment tools, could serve as a template for the preparation of a Health Background Study completed as part of a larger scale Secondary Plan development process. Monitoring would again make more sense at a master plan and Secondary Plan level to ensure that policy objectives related to health are being achieved in the long-term. The responsibility for monitoring, however would likely fall under the purview of the municipality.
**What are Other Jurisdictions Doing to Assess the Health Impacts of Development**

**4.1 Introduction**

As a growing body of research demonstrates a clear linkage between the built environment and health outcomes, the implementation of policy and associated regulatory tools is gaining momentum, but is still in its infancy.

A scan of municipal jurisdictions across North America, reveals that while many are adopting language that recognizes the linkage between the built environment and health outcomes in their long-term planning documents, few have developed and/or implemented mechanisms to directly influence health outcomes through the planning and development approval process. Further, given the emerging nature of development-related health assessment mechanisms, information on the application, success/failures and resulting lessons learned are, at this point in time, still highly limited.

Like Toronto, a number of municipal jurisdictions in North America and Europe have developed and adopted Health Impact Assessment processes and procedures. While Health Impact Assessments have significantly advanced the recognition of the linkage between health and the built environment within local and regional planning regimes, Health Impact Assessment processes are primarily focused on evaluating large scale public sector development projects and/or planning initiatives, with little bearing, if any, on smaller-scale privately-initiated development proposals.

The following initiatives are highlighted to demonstrate the varied approaches being used to manage health outcomes through the development process. The examples provided below are by no means a complete inventory of approaches in support of healthy development, but rather an informative sampling.

**4.2 San Francisco, California – Development Checklist**

Building on the Health Impact Assessment process, the San Francisco Department of Public Health’s Program on Health, Equity and Sustainability developed the ‘Healthy Development Measurement Tool’ to measure and evaluate a wide range of health-related outcomes associated with built form and development (including both residential and non-residential development). An indication of the Tool’s success is that it is now used by municipalities across the US.

In San Francisco, this measurement tool has subsequently informed the development of a ‘Development Checklist’ to aid in the evaluation of plans and development proposals. Updated annually to reflect the ever-evolving understanding of the linkage between development and health, the checklist is intended as a strictly voluntary instrument to be used by community groups, developers or other interests in the development process. The latest version of the checklist is found at: www.thehdmt.org/development_checklist.php.

**4.3 Galveston, Texas – Health Development Measurement Tool**

The City of Galveston, Texas recently adopted the Healthy Development Measurement Tool as part of its post-disaster recovery efforts following Hurricane Ike, which damaged or destroyed approximately 70% of the city’s buildings. In partnership with the Center to Eliminate Health Disparities at the University of Texas Medical Branch, county agencies and community-based service providers, the City of Galveston is working to ensure that rebuilding efforts support desired health outcomes and has amended its development ordinances to incorporate this tool as a way to assess impacts on health. The Tool is also being used to test and evaluate large scale public sector development initiatives, such as area plans. More information on the City of Galveston’s use of the Healthy Development Measurement Tool can be found here: www.utmb.edu/cehd/projects/ghiap.html.

**4.4 Decatur, Georgia – Active Living Initiative**

The City of Decatur, Georgia, a suburban community of about 19,000 people just outside of Atlanta, has emerged as a leader in promoting public health and active living through planning and development. The City incorporated the Health Impact Assessment process
into the development of its new Transportation Plan. Decatur also restructured its Recreation Division into a new Active Living Division and created an Active Living Advisory Board that provides direction to the City on a variety of long-term active living and urban agricultural initiatives. More information on the City of Decatur’s use of the Health Impact Assessment process and its active living initiatives can be found here: www.decaturga.com/Modules/ShowDocument.aspx?documentid=1211 and www.decaturga.com/cgs_citysvcs_activeliving.aspx.

4.5 Simcoe Muskoka District Health Unit – Healthy Community Design: Policy Statements for Official Plans

Working with planning professionals and community stakeholders, the Simcoe Muskoka District Health Unit recently developed Healthy Community Design: Policy Statements for Official Plans (2010), a document designed to provide direction to local municipalities with suggested policy language for inclusion in local Official Plans and related initiatives. The Healthy Community Design document highlights five broad elements that it regards as integral to promoting community health through the planning process (Table 4). The Healthy Community Design document has directly resulted in the inclusion of new supporting policies within some of the area municipalities through their ongoing Official Plan Reviews, although whether these policy recommendations get incorporated into the future regional and local Official Plan’s remains to be seen.

In addition, the Healthy Community Design document has resulted in some area municipalities, like the City of Orillia, opting to circulate development applications through the Health Unit for review and comment, albeit on an ad hoc basis. More detailed information on the Simcoe Muskoka District Health Unit’s Healthy Community Design document can be found here: www.simcoemuskokahealth.org/JFY/OurCommunity/healthyplaces/Healthydesign.aspx.

Table 4 - Simcoe Muskoka Healthy Community Design Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Environment                    | • Ensure land use designation has minimal impact on health, the environment and overall quality of life  
• Protect and preserve the natural environment and greenspace  
• Reduce reliance on traditional energy systems, conserve energy and protect air quality  
• Decrease use of single occupancy motor vehicles and reduce motor vehicle trips |
| Injury and Safety              | • Build compact neighbourhoods that increase density and reduce automobile dependency  
• Provide infrastructure that supports safe walking and cycling  
• Design roads that ensure the safety of all users |
| Physical Activity and Sun Safety | • Ensure a built environment that supports and encourages active transportation  
• Provide recreational opportunities for all  
• Develop a transportation system that is multi-modal, accessible and interconnected  
• Ensure shade protection is available at outdoor venues |
| Food Access                    | • Ensure that healthy food is available in every neighbourhood  
• Preserve and protect land currently used or with the potential for future use in the growing and production of food |
| Social Cohesion and Well-being | • Support complete, cohesive neighbourhoods and mixed housing for all ages to promote health and safety  
• Provide green spaces and build public spaces for residents to meet and congregate |

4.6 Summary of Findings

While recognition and understanding of health outcomes related to planning and development decisions is increasing, a scan of municipalities across North America did not reveal the implementation of any Health Background Study requirements as part of the municipal planning and development approvals process. Although Health Impact Assessments are becoming an accepted standard by many municipalities worldwide, to date, their application is geared towards the evaluation of large-scale publicly driven development and infrastructure initiatives, rather than smaller-scale development applications.

Notwithstanding this, it is clear that the inclusion of enabling policies in a number of municipal long-range planning documents reflects a growing desire to include health-based evaluation mechanisms into the approvals process. Enabling policies are crucial for laying the groundwork for such mechanisms, because they establish a basis for them and inform the public and development community of the municipality’s intentions.
Review of Other Studies Required Through the Development Process

5.1 Introduction
Under the Planning Act jurisdiction is given to a municipality to identify study requirements that support/deny a development application through the requirements of complete application policies in an Official Plan. Council may refuse to accept or further consider a planning application until all such materials have been received. Many forms of these study requirements are already being used by municipalities. Learning from background studies already in place will provide additional information in the advancement of methods and strategies in the development and implementation of a Health Background Study Framework.

5.2 Traditional Study Requirements
Our review (see Appendix II: Review of Other Studies) looked at the following seven key studies that may be required as part of a complete development application:

1. Planning Rationale Study (also called Planning Justification Study)
2. Environmental Impact Study
3. Transportation Impact Study
4. Community Services and Facilities Assessment
5. Sun/Shadow Study
6. Servicing Report
7. Noise Impact Study

These studies, as opposed to the myriad of other studies that may be required by a municipality, were chosen for the simple reason that they are arguably the most common studies required as part of a development application submission. Common to each of these study requirements is a statement of purpose, the articulation of minimum information and technical requirements, guidance on the analysis of the information and conclusions.

The overarching objective of all of these required studies is to avoid the creation of undue adverse impacts associated with the nature, scale and form of development. The common purpose of these studies is to determine whether or not the development is supportable from a technical standpoint (specific to the study requirements) and, where appropriate, to identify ways to enhance and/or mitigate specific impacts associated with the development.

5.2.1 Study Triggers

Each of the seven reviewed studies is associated with either:

- a particular type or types of planning application (i.e., Official Plan amendment, Zoning By-law amendment, etc.), or
- the nature of a proposed development (i.e., being adjacent to a natural area).

In some cases, both factors may be required to trigger a study. While some of the studies are mandatory if the trigger factors are met, others rely on the discretion of planning officials. In all cases, it was found that the discretionary studies were very frequently required, although no statistics are kept regarding what percentage of applicants are made to complete them.

5.2.2 Scope of Study

Three of the seven studies required all applicants to meet the same requirements and did not allow for any variance in scope. It can be surmised, however, that smaller development applications would probably result in more succinct studies and that some required study elements might not apply. Four studies allowed some variance in the scope of study, whether based on project scale or the category it fell under.

5.2.3 Format

Format requirements varied widely among the seven studies, from brief summary letters to lengthy technical reports drafted by professionals. Study costs and time periods all depended on the scale and complexity of individual developments and could not be generalized.
Most of the existing studies do, however, offer precedents for a future Health Background Study, in so far as the formats are not particularly regimented (i.e. none of them are structured as responses to forms), allowing the applicant freedom as to how to draft the report, even if specific topics must be covered. Further, many technical studies include a “YES/NO” to the individual development application, and if “YES”, there is typically an array of improvement requirements and/or suggested enhancement or mitigation techniques.

5.2.4 Health Impacts

A number of the studies contained specific references to health-impacting issues. These most commonly related to density and land use, specifically proximity to other land uses, as well as general aesthetic conditions that encourage walking by making the public realm more appealing to pedestrians. These aspects might be relocated from their present position into the scope of a Health Background Study, but would probably be more appropriate to strengthen and leave in place.

The scope of a specifically health-related study would naturally have to be more extensive and comprehensive than these individual components currently found in other studies. By addressing health as a primary study topic, as opposed to an incidental outcome of another study, it could be dealt with in a more deliberate and direct manner.

5.3 Case Example: City of Toronto Development Guide

The City of Toronto’s Development Guide is the most comprehensive document in terms of establishing terms of references for the various studies required through the planning and development approvals process. The Guide includes the following components:

- **Study Description**
  A general description of the study, its intent and desired format (often including guidance on the length of the document).

- **Study Triggers**
  When such a study is or may be required based on the type of development application (i.e. Official Plan Amendment, Zoning By-law Amendment, Plans of Subdivision, Plans of Condominium or Site Plan Control).

- **Rationale**
  The reasons the study is required and its importance in the application review/evaluation process.

- **Required Content/Core Elements**
  Documentation of the specific technical requirements and elements to be addressed, as they relate to the specific development proposal. In many circumstances, the required content references specific policies and/or standards for which compliance must be demonstrated.

The Toronto Guide establishes a very simple, but effective terms of reference for each report and study that may be required as part of the development application. This makes the Toronto Guide a user-friendly format that should be considered as a potential template for the development of the terms of reference for the Health Background Study.

5.4 Summary of Findings

There is a strong tradition in the Ontario planning approvals process for a municipality to require detailed thematic studies that deal with specific issues affecting neighbouring properties, infrastructure and the environment. The new Planning Act has now enshrined this practice with legislative requirements around the definition of a “complete application”.

Of the surveyed materials, the City of Toronto’s Development Guide provides a strong starting point for the development of a Health Background Study Terms of Reference. Since the Health Background Study would be a new requirement, the Terms of Reference would need to be established with a significant amount of precision to ensure appropriate study conclusions, and to articulate how those conclusions are to be implemented. Ultimately, the Health Background Study Terms of Reference will need to be fully cognizant of its ultimate purpose, and expected effect on development decisions.
6

Summary of Interview Outcomes

6.1 Overview
The consultant team conducted a series of interviews with stakeholders to gain a sense of general support levels for the concept of a new study requirement, and seek advice for what directions it should or could take. Interview subjects included planners, developers and public health professionals who would likely be directly involved in any such future practice. In total, 25 interviews were conducted, representing 13 planners, two developers, 11 public health officers and two private health consultants.

The following is a highly condensed summary of the responses received during the stakeholder interviews. Please refer to Appendix III for more detailed interview question/response summaries. As a condition of the interviews, stakeholders are to remain anonymous. However, the correlation between responses and professional sector (planning, development or public health) are indicated where relevant.

6.2 Summary of Findings
There was broad divergence in opinion about the implementation of a Health Background Study among the interviewees. Not surprisingly, the development industry is extremely concerned about cost and time delay. These are legitimate concerns that may be ameliorated by further education and a commitment to ensure clear Terms of Reference, and reasonable response times.

Public health officials were highly supportive, while planners tended to be supportive in principle, but questioned the manner in which it could be implemented. In particular, the question of how it could fit into the development application process and what types of development it should deal with was raised. Many planners emphasized the relative strength of the existing system and expressed concern that additional study requirements, if broadly imposed, could unduly slow the development process.

Planners in the Region of Peel and its local municipalities were generally accepting of a Health Background Study component. Mechanisms, elements, issues and challenges were discussed, with an underlying consensus supporting the need and further development of this study. Questions and concerns posed by respondents focused on logistics. How this study would be incorporated into current practice, the measurement of elements, and the role such a study would play in development decisions were highlighted. While open and supportive of this concept, planners were concerned with its implementation. Despite this, respondents acknowledged this project as crucial to furthering public health goals.

In contrast, Toronto planners were more hesitant when asked their opinion of a Health Background Study Framework. On the whole, planners were generally unsupportive or moderately supportive of this initiative. Toronto planners were generally sympathetic to the idea that health considerations should factor more prominently in planning decisions, but were mostly unsupportive of an additional study to address these considerations. As a counter argument, respondents promoted the role of planning policy in achieving health goals, and reinforced the position that health considerations were already addressed, or should be addressed in Official Plan policy. Generally consensus was that no new study is required.

The primary conclusion drawn from these interviews is the overall lack of any particular consensus in terms of purpose, content, applicability and implementation. It is assumed that this lack of overall preference is a result of the newness of the topic, rather than the approach. (The study requirement approach is relatively typical in dealing with other technical requirements of the planning approvals process in Ontario). Ultimately, a diverse and competing range of interests must be managed and balanced in the development of a Health Background Study or comparable initiative that raises standards, promotes value-added development, generates broad stakeholders buy-in, and successfully integrates competing disciplines to achieve a desired public health outcome.
7.1 Key Findings from Work to Date

1. The Planning Act empowers municipalities with the ability to require “studies” applicable to development applications of all types, through the requirements for a “complete application”. This applies to the potential requirement for a Health Background Study.

2. Recent Provincial policy strongly supports the interconnections between land use planning and improved public health. Key Provincial directives specifically promote:

   • Conservation of all significant natural heritage features;
   • A mix of uses at higher densities;
   • Use of public transit, and a reduction in auto dependence;
   • Creation of complete communities with places to live, work, shop, recreate and be educated in proximity; and,
   • Creation of liveable healthy communities.

3. The Region of Peel and its constituent municipalities are developing policies that are supportive of healthy communities and provide a framework that would facilitate the implementation of Health Background Studies in selected circumstances.

4. The Peel Healthy Development Index is a useful starting point for the establishment of criteria that could be included within a Health Background Study, with clear connections with existing policies, planning objectives, and according to the literature, health outcomes.

5. The City of Toronto’s Green Building Standards identifies key principles for establishing evidence-based criteria that should provide guidance for the development of a Terms of Reference for a Health Background Study requirement. Specifically, the criteria should be:

   • measurable;
   • performance-oriented;
   • focused on the design and construction of the built form;
   • user-friendly; and,
   • set a high, but achievable, expectation for performance.

6. The Toronto Health Impact Assessment represents a potential basis from which to build upon in establishing the requirements – both content and process – for the Health Background Study.

7. Jurisdictions across North America have begun to recognize the important link between land use planning and public health outcomes. Many have included enabling policies in their long-term planning documents. However, notwithstanding that broad recognition, there is little information available on actually implementing a direct requirement that evaluates the relative health merits of individual development applications.

8. The interview process has identified a number of key observations:

   • there is general recognition amongst both planning and health professionals of the linkage between the built environment and public health;
   • the development industry is extremely wary of any new requirements that may add to the cost, or delay the development approval process; and,
   • while there are no clear preference trends in terms of the purpose, content, applicability and implementation of a Health Background Study, there appears to be general support for strengthened Official Plan policies around public health and willingness to explore the
application of a Health Background Study requirement at the Secondary Plan scale.

7.2 Key Recommendations for Implementation of a Health Background Study Terms of Reference

1. Establish a Supportive Policy Framework – As an initial step, municipalities, through their respective Official Plans should establish a strong policy framework that makes the connection between development and health outcomes, establishes corresponding policy objectives/targets for public health, and enables the implementation of a Health Background Study requirement as an optional part of the development approvals process. In all cases, regulatory requirements should flow explicitly from policy. This policy framework for healthy development, which originates at the provincial level, is transmuted down to municipal Official Plans and from there to regulations; each step increasing in detail and specificity.

In the case of a multi-tiered jurisdiction, the upper tier municipality is primarily responsible for health policy. It is therefore recommended that the upper tier municipality should, in addition to updating its Official Plan, play a leading role in working with lower tier municipalities to develop a Health Background Study template for their use. This would have the benefit of speeding up the implementation process, while ensuring consistency across lower tier municipalities and guaranteed conformity with the upper tier Official Plan.

2. Determine where in the planning process can the Health Background Study be applied – With enabling policies in place, municipalities should determine the most appropriate application of such a study requirement. It is recommended that the Health Background Study requirement be, at least initially, best applied at the Secondary Plan stage. This recommendation stems from the recognition of the comprehensive nature of the Secondary Plan process and the subsequent ability to influence all aspects of a community’s structure and components that are known to affect public health.

While developments involving an individual building, or small group of buildings, may impact health, the fact that they do not construct a complete community environment means that that effect is less significant. For such developments, existing study requirements are sufficient and adding more would create undue complexity and delay in the application process. Secondary or block plans, meanwhile, clearly affect density, land use proximity and road alignments and should be open to greater scrutiny. Limiting the Health Background Study to such large-scale developments would also help to avoid additional backlog in planning departments.

Overtime, modified versions of the Health Background Study may be developed that would apply to a broader range of planning and development contexts, such as Draft Plans of Subdivisions of various scales, and Site Plan proposals for developments on individual sites.

In the event that a municipality is not supportive of implementing a requirement for a new separate study, opportunities for the inclusion of health considerations could be administered through the existing Planning Rationale Report/Planning Justification Report. A Planning Rationale Report is a complete document designed to demonstrate conformity with policies and standards, including those identified in the Official Plan(s). If a municipality updates policy requirements and guidelines (e.g. for urban/community design) to include specific standards aimed at health, the relationship between health and the built environment could be systematically addressed at this level. Present Planning Rationale Reports do indirectly address health issues through discussion of land use and density, however, a more explicit component on health impacts could be added.

3. Health Background Study Scope – The scope of the Health Background Study is also a critical consideration in determining its application. Undoubtedly, as evidenced by the response from interviewees, there are countless elements that could be measured that may have a direct or indirect impact on public health. At this early stage, it is recommended that the Core Elements as defined by the Peel Healthy Development Index from the initial basis for the scope of the Health Background Study required.

The Peel Healthy Development Index presents a variety of elements for consideration in the relationship between health and the built environment. Reviewing the Index from a planning context, the elements are already addressed in one form or another in municipal planning policy and have existing standards and measures which developers must demonstrate adherence to through existing study requirements.

Furthermore, the establishment of any new Health Background Study requirements should rationalize and justify the inclusion of specific measures. Of
those existing policies and documents reviewed, the Peel Healthy Development Index forms the strongest template for the scope of issues to be dealt with through such a study, as well as a viable scoring system.

In the future, as developers and local area planners gain familiarity with the Health Background Study requirement and as research and policy evolves, other elements that have a demonstrated effect on the determinants of health – beyond those currently present in the Peel Healthy Development Index – could be integrated into the study’s scope. For example, access to healthy food is one element that has a significant impact on health, but is not addressed in the current Health Background Study - and there are several others.

4. Health Background Study Format – The study format should be as simple, standardized, and instructive as possible in order to aid applicants in achieving the desired objectives and aid municipal planning staff in the evaluation of study submissions.

Ultimately, the purpose of the Health Background Study is to ensure that new development promotes and supports healthy and active communities. The requirement for a Health Background Study should not serve as a burden to developers or local planners and should be designed to minimize any additional delays or costs to the already complex development approvals process.

The Terms of Reference should be designed to create a standardized method for development interests (applicants) to demonstrate their achievement of key healthy community design elements and for municipalities to evaluate development proposals based on key community health objectives.

The Terms of Reference should provide a ‘checklist’ to evaluate the success of new developments in achieving minimum standards of community health. It should not be applied alone as a means for approving or rejecting private development proposals, but rather as an informative tool in the application evaluation process.

The following are the key components that should be included in the Terms of Reference for each of the Core Elements being evaluated:

- **Rationale:** Description of the Core Element and why it is important from a community health perspective.

- **Objectives:** Statement of desired development objective

- **Standards:** Associated minimum development standards to be achieved by the proposed development.

- **Key Questions:** List of key questions that the applicant should consider in the planning and preparation of their proposed development. These questions are intended to initiate dialogue within the development team and with the municipality on strategies/approaches to meet desired outcomes.

- **Reporting/Content Requirements:** Description of the minimum reporting requirements to demonstrate compliance/achievement of the Objectives/Standards.

5. Other Considerations for Implementation – The implementation of an additional study requirement as part of the planning approvals process should recognize the need for an educational process or time period as development applicants and regulators familiarize themselves with expectations and technical elements associated with preparing and reviewing such studies. It is recommended that each municipality begin by developing a repository of such studies to share examples of high quality submissions with subsequent applicants and counterparts in other municipalities to communicate submission expectations. Finally, municipalities should determine the appropriate study review process and which department and/or departments will be responsible for review of such studies, or components thereof.

7.3 **Next Steps**

Further work with the Steering Committee and stakeholders will be required to define/refine potential elements and consider their prioritization based on which will have the greatest impact with an appropriate level of effort (both by applicants responsible for preparing the study and reviewers at the municipal level). Additionally, further consideration will be given to the positions taken by developers, and the means by which they could be engaged in a future policy development process.

In this report, elements for further reflection and discussion were extrapolated from related background reports required by municipalities, as well as from provincial policy, municipal policy, the Peel Healthy Development Index and a variety of other relevant studies and reports. Identified elements must now be broken down into their criteria
to further explore the impact of certain aspects of the built environment on public health outcomes. Elements must be rooted in key health drivers that will be further refined through comprehensive consultation process and discussion with both the Region of Peel and City of Toronto.

Ultimately, this report has shown that there exists a wealth of opportunity for real change and progress in influencing health within our communities. The next steps will deal with translating that opportunity into a practical and action-oriented approach to developing a Health Background Study Framework and defining how it is best integrated into the development application process.
Appendix I
## Appendix I: Review of Peel Healthy Development Index Core Elements

<table>
<thead>
<tr>
<th>Core Elements</th>
<th>Typical Standard/Measure</th>
<th>Is the element/measure under the influence of planners and/or developers?</th>
<th>Is there a practical way of assessing this?</th>
<th>Is it reasonable to expect developers to address it?</th>
<th>Key Conclusions</th>
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</thead>
<tbody>
<tr>
<td><strong>Density</strong></td>
<td>Density refers to a measurement of the number of families, individuals, employees, dwelling units, households or housing structures per unit of land area. Higher residential densities, not only result in a more efficient use of land, but also increase a community’s ability to support a variety of services and facilities within proximity, which in turn support walkability and physical activity outcomes. Density standards/targets are established in both Official Plan policies and implementing zoning. Typical density measures include: <strong>Residential Density</strong> • Units per unit of land area • Floor Space Index (FSI)/Floor Area Ratio (FAR) • Persons per unit of land area <strong>Non-Residential Density</strong> • FSI/FAR • Jobs per unit of land area Note: Places to Grow: The Growth Plan for the Greater Golden Horseshoe establishes density targets using persons and jobs per hectare as its primary measure. This measure, as a Provincial conformity requirement, has or will be incorporated into all Official Plans for municipalities within the Growth Plan Area. However, other measures, such as FSI, may still be utilized to support the achievement of Provincial density targets.</td>
<td>Planners • Planners have some influence over density, in so far as they assist municipalities in establishing targeted density requirements to achieve particular development objectives (i.e. transit-supportive development, etc.). • Density standards are established and prescribed in municipal and Provincial planning policy. At the municipal level, density is regulated both through Official Plan policies, which establish broad density targets, and Zoning By-laws that establish more site/area specific density requirements (typically through min. and max. density provisions). Overall, planners must adhere to these established density standards.</td>
<td>Yes: • Conformity with existing density requirements is a key consideration in the review of development applications. Developers, as part of the development approvals process, must demonstrate how their proposed development conforms with those density requirements (or, if not, how the development meets the intent of the local planning regime). • Density measurements in the Peel Health Index are relatively standard measures already in place in municipal planning policy and development approval processes.</td>
<td>Yes: • Developers must conform with municipal planning policy (Official Plan and Zoning By-law) that establish density requirements.</td>
<td>• Density is highly regulated by current planning policy (Official Plan and Zoning By-law). • Developers have to work within those policy requirements. Through the development application process developers must demonstrate achievement of density standards through existing planning and supporting studies, namely Planning Justification Reports.</td>
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<td><strong>Service Proximity:</strong></td>
<td>Service proximity refers to the optimal distance between particular uses to maximize their accessibility (i.e. living near jobs and services, or even better, to have jobs and services provided where one lives). Employment proximity considerations are outlined in Provincial and local policy where live work communities rather than ‘bedroom communities’ are promoted, however no strict standards exist.</td>
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<td>Municipalities, typically at the Secondary Plan level, frequently establish proximity standards based on a maximum radial distance between uses and/or services. Radial distance requirements are used to maximize accessibility, usually by walking or transit, to a particular use and/or service. The most common service proximity measure currently utilized relates to gradient residential and/or job densities in proximity to transit stations (i.e. minimum density requirements in radial proximity to transit stations; minimum density of 4 FSI within 400 metres of a transit facility).</td>
<td>On a site-specific basis, proximity to services and/or other uses is somewhat difficult to influence. At a broader planning scale, such as a Secondary Plan or Block Plan level where more comprehensive planning is done, planners and developers can have a greater influence on ensuring appropriate service proximity objectives are achieved. Service proximity is somewhat easier to address in an existing urban setting (such as in parts of Toronto versus the Region of Peel), insofar as land use mix, population densities, and community service infrastructure is more or less established and already achieving desired levels of proximity/accessibility.</td>
<td>Yes: Municipalities may establish specific service proximity requirements. The recommended measures established in the Initial Scoring Guide, found in the Peel Health Index, is a reasonable basis for establishing such standards and their subsequent measurement.</td>
<td>Yes: So long as municipalities establish requirements for achieving specific service proximity requirements, developers must conform to those policies. The City of Toronto, as part of its development application process, requires developers to undertake Community Services and Facilities Assessments to identify available community services/facilities in proximity to their subject development and to demonstrate that the population generated by their proposed development can be appropriately served by existing community services/facilities.</td>
<td>• Service proximity may be regulated through current planning policy. In some instances, it already is, through transit-supportive density requirements requiring higher density developments in proximity to existing or planned transit facilities. • Developers have to work within existing policy requirements. Through the current development application process developers must demonstrate achievement of service proximity through existing planning and supporting studies, namely Planning Justification and Community Services and Facilities reports. • Proximity to employment is more difficult to address, given that land use designations, particularly with respect to employment areas are strictly regulated by Provincial and municipal policy. In other words, with the exception of neighbourhood scale service and retail commercial uses, it is difficult to influence the location of larger scale employment uses. Notwithstanding that, there is considerable policy support at the provincial and local level for live–work employment opportunities.</td>
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<td><strong>Land Use Mix</strong></td>
<td>Land Use Mix refers to the mix of uses either within a building or an area of land. The achievement of mixed use forms of development can contribute to positive health outcomes by promoting service/use proximity, more compact urban development and subsequent walkability.</td>
<td>Like density, land use mix is highly regulated in existing planning policy (both through Official Plan policy and implementing zoning standards). Such policies may establish specific mixed use districts, but also establish permissions/requirements for neighbourhood scale service and retail commercial uses within new residential developments. Municipal Official Plan policies, taking their cues from Provincial policy, also establish requirements for the provision of a diversity of housing types, forms and tenures to meet the current and future needs of a community. As part of housing mix policies, municipalities typically establish affordable housing targets, based on a targeted percentage of the total housing stock (i.e. 35% percent of total units shall be affordable). Parkland and open spaces are also a key consideration in the overall land use structure. Parkland provisions are established by the Planning Act, which are in turn implemented through enabling policies in municipal Official Plans.</td>
<td>Planners • Managing and directing land use to achieve efficient development and land use patterns is a fundamental objective of Provincial planning policy (as per both the Provincial Policy Statement and the Growth Plan). • Correspondingly, municipal Official Plans typically include a range of supporting policies to promote land use mix and mixed use areas through the delineation of land use designations, which are then carried forward through implementing zoning and/or Secondary Plan policies.</td>
<td>Yes: Under the current development approvals process, developers must demonstrate compliance with land use designations, achievement of housing mix targets and parkland provisions.</td>
<td>Yes: Developers must conform with municipal planning policy (Official Plan and Zoning By-law) that establish land use designations and objectives for mix use development. If a developer seeks to stray from those established objectives, they must go through an Official Plan and Zoning By-law Amendment process to rationalize their proposed divergence from the policy/regulation.</td>
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<td><strong>Street Connectivity</strong></td>
<td>Policy directives with respect to maximum block size and street network are typically established through the design and transportation policies of a municipal Official Plan, with further refinement and specificity occurring at the Secondary Plan scale. Standards pertaining to intersection location/frequency are typically established at the Regional or Single-Tier scale through Transportation/Road Standards.</td>
<td>Planners • Transportation policy, standard street types, and accessibility standards are provided in both Provincial and municipal policy. Developers • Developers must adhere to Provincial and municipal policy which impact street connectivity and block size.</td>
<td>Yes, with conditions: Block size and street connectivity tend to be context specific and not necessarily based on rigid/measurable standards. At a Secondary Plan or Block Plan scale, more rigid or alternative requirements for block size and street connectivity may be established.</td>
<td>Yes: Developers must conform with municipal Official Plan/Secondary Plan policies.</td>
<td>• Developers have to work within Official Plan and Secondary plan policy requirements, which establish general directives for street connectivity. Through the development application process developers will be asked to complete a Traffic Operations Assessment and a Transportation Impact Study.</td>
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<td><strong>Road Network and Sidewalk Characteristics</strong></td>
<td>Road Network and Sidewalk Characteristics may include a myriad of considerations, including, but not limited to roadway hierarchy and design, traffic calming measures, sidewalk provision/design, cycling facility provision/design and streetscape design elements (lighting, paving, landscaping, etc.). Standards for these elements are established through municipal transportation and engineering standards, Official Plan/Secondary Plan policies and Urban Design Standards/Guidelines, and typically vary between contexts.</td>
<td>Planners • Planners must adhere to established standards and may work to institute alternative standards/approaches at the Secondary Plan or Block Plan level (i.e. implementation of woonerfs in Toronto’s West Don Lands) Developers • Developers must adhere to municipal standards which inform the development of road networks and sidewalk characteristics.</td>
<td>Yes, with conditions: Road network and streetscape design tend to be context specific and not necessarily based on rigid/measurable standards. At a Secondary Plan or Block Plan scale, more rigid or alternative requirements for road network and streetscape/sidewalk characteristics may be established.</td>
<td>Yes: Developers must conform with municipal Official Plan/Secondary Plan policies.</td>
<td>• Developers have to work within Official Plan and Secondary plan policy requirements, which direct the general premise for the development of or changes to, the Road Network and Sidewalk Characteristics. Through the development application process developers will be asked to complete a Planning Rationale Report, Traffic Operations Assessment and a Transportation Impact Study.</td>
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</table>
| Parking      | Automobile and bicycle parking standards are typically established through Zoning By-laws, which establish land use specific parking requirements. Residential parking standards are typically measured on the basis of ‘x’ parking spaces per ‘x’ residential units. Non-residential parking standards are typically measured on the basis of ‘x’ parking spaces per ‘x’ units of Gross Floor Area. | Planners  
- Planners must adhere to established standards and may work to institute alternative standards/approaches at the Secondary Plan or Block Plan level (i.e. Toronto City Council recently approved a 42 storey condominium tower – 426 University Ave. – with no permanent parking spaces, in place of 9 autoshare spaces and 315 bicycle parking spaces)  
Developers  
- Developers must adhere to municipal parking standards and may pursue alternative standards/approaches subject to justification and approval by the local approval authority. | Yes: Demonstrated adherence to parking standards.  
Yes: Developers must conform with parking standards as established through local Zoning By-laws, some exemptions or cash-in-lieu of parking may be permitted on a site-specific basis.  
Yes: Developers must work within existing parking standards (as established in local Zoning By-laws). Through the development application process developers will be asked to complete a Planning Rationale Report, which often includes a parking study component to demonstrate proposed parking provisions and compliance with existing standards (or justification for alternative standards if proposed). |  |
| Aesthetics and Human Scale | Aesthetics and Human Scale are typically measured based on built form requirements established at the Secondary Plan level and accompanying Urban Design Guidelines/Standards, as well as through Zoning By-law regulations. Typical measures include: minimum and maximum setbacks to ensure streetwall consistency; building step-backs to mitigate impacts of taller building elements; building heights (minimum and maximum); requirements for ground level entrance locations and façade treatments; landscaping standards and public realm requirements; and, screening requirements for loading and servicing elements. | Planners  
- Planners must adhere to established design and built form standards as established by municipal requirements.  
Developers  
- Developers must adhere to established design and built form standards as established by municipal requirements. | Yes: Demonstrated adherence to established design standards.  
Yes: Developers must conform with established design standards and may pursue design innovations, subject to demonstration that they adhere to general policy objectives and subsequent approval by municipal authorities.  
Yes: Developers have to work within policy requirements that integrate human scale and design aesthetics into development. Through the development application process developers may have to demonstrate achievement of human scale through the Site Plan approvals process and/or Secondary Plan process (depending on the scale of the development application). |  |
Appendix II
### Appendix II: Other Relevant Studies

<table>
<thead>
<tr>
<th>Study Name and Description</th>
<th>Purpose and Intent</th>
<th>Triggers</th>
<th>How Common (if Discretionary)</th>
<th>Variance in Scope</th>
<th>Format</th>
<th>Required Resources, cost, time</th>
<th>Health Components (Elements from the Index)</th>
</tr>
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</table>
| **Planning Rationale Study (City of Toronto)** | The document is intended to aid the applicant in organizing their response and assist staff in reviewing the proposal. | Full Planning Rationale report required for:  
- Official Plan Amendment  
- Zoning By-law Amendment  
- Plans of Subdivision  
- Plans of Condominium (conversion of existing rental to condominium)  
- Significant Site Plan Control applications  
- Planning Rationale in cover letter format required for:  
  - Plans of Condominium (new condominiums)  
  - Smaller Site Plan Control applications  
  - Part Lot Control  
  - Plan Revisions | The overall Planning Rationale requirement is non-discretionary. | Depending on the complexity of the application, the information requirements can be addressed in a letter of several pages or a longer report. | A Planning Rationale Study includes:  
- Description of the proposal, overview, major statistics (i.e., height, density, parking), relevant phasing issues, site and contextual considerations.  
- Process steps/approvals required (i.e., Zoning, Site Plan Control, Land Division, Condominium).  
- Site description and surrounding land uses/context/built form.  
- Site’s planning history such as previous approvals, legislative references, relevant authorities (i.e., Site Plan Control Agreements, specific By-law) with copies of relevant documents.  
- Planning Rationale, if applicable, should address relevant Provincial Policy Statement and Planning Act considerations; relevant Official Plan policies (Metroplan, former municipal OP, Toronto Official Plan) including information/rationale as to how and why Official Plan policy is being addressed by the proposal; with relevant Zoning By-law information, areas of compliance and non-compliance and why.  
- Discussion of how the proposal will address Official Plan Section 37 policies (Policies 5.1.1.1 to 5.1.1.9 and any Secondary Plan provisions), if applicable.  
- Analysis and opinion as to why the proposal is good planning, including issues of impact.  
- Summary and conclusions.  
- For Zoning By-law Amendments, the results of the Preliminary Project Review should be provided or a list prepared detailing the potential amendments to the Zoning By-law; a formatted draft Zoning By-law Amendment is not required for a complete application. | **Density** - demonstrate conformance with density requirements  
- Proximity to other land uses  
- Show how service proximity relates to development requirements  
- Human Scale - planning Rationale Study shows height considerations  
- Addresses parking requirements |
| **Description** | **Required Resources, cost, time** | **Format** | **Triggers** | **How Common (if Discretionary)** | **Variance in Scope** | **Study Name and Description** | **Purpose and Intent** | **Appendix II: Other Relevant Studies** |
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- Description of the proposal, overview, major statistics (i.e., height, density, parking), relevant phasing issues, site and contextual considerations.  
- Process steps/approvals required (i.e., Zoning, Site Plan Control, Land Division, Condominium).  
- Site description and surrounding land uses/context/built form.  
- Site’s planning history such as previous approvals, legislative references, relevant authorities (i.e., Site Plan Control Agreements, specific By-law) with copies of relevant documents.  
- Planning Rationale, if applicable, should address relevant Provincial Policy Statement and Planning Act considerations; relevant Official Plan policies (Metroplan, former municipal OP, Toronto Official Plan) including information/rationale as to how and why Official Plan policy is being addressed by the proposal; with relevant Zoning By-law information, areas of compliance and non-compliance and why.  
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- Human Scale - planning Rationale Study shows height considerations  
- Addresses parking requirements |

### Description

- **Purpose and Intent**: The document is intended to aid the applicant in organizing their response and assist staff in reviewing the proposal.

### Triggers

Full Planning Rationale report required for:
- Official Plan Amendment
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- Significant Site Plan Control applications

Planning Rationale in cover letter format required for:
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- Smaller Site Plan Control applications
- Part Lot Control
- Plan Revisions

### How Common (if Discretionary)

The overall Planning Rationale requirement is non-discretionary.

### Variance in Scope

Depending on the complexity of the application, the information requirements can be addressed in a letter of several pages or a longer report.

### Format

A Planning Rationale Study includes:
- Description of the proposal, overview, major statistics (i.e., height, density, parking), relevant phasing issues, site and contextual considerations.
- Process steps/approvals required (i.e., Zoning, Site Plan Control, Land Division, Condominium).
- Site description and surrounding land uses/context/built form.
- Site’s planning history such as previous approvals, legislative references, relevant authorities (i.e., Site Plan Control Agreements, specific By-law) with copies of relevant documents.
- Planning Rationale, if applicable, should address relevant Provincial Policy Statement and Planning Act considerations; relevant Official Plan policies (Metroplan, former municipal OP, Toronto Official Plan) including information/rationale as to how and why Official Plan policy is being addressed by the proposal; with relevant Zoning By-law information, areas of compliance and non-compliance and why.
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### Required Resources, cost, time

- **Density** - demonstrate conformance with density requirements
- Proximity to other land uses
- Show how service proximity relates to development requirements
- Human Scale - planning Rationale Study shows height considerations
- Addresses parking requirements

### Health Components (Elements from the Index)

- Density – demonstrate conformance with density requirements
- Proximity to other land uses
- Show how service proximity relates to development requirements
- Human Scale – planning Rationale Study shows height considerations
- Addresses parking requirements

### Cost and Timing

Vary widely based on complexity and scale of project.
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<td>Environmental Impact Study (Conservation Halton)</td>
<td>An objective assessment of a development proposal in or adjacent to a natural area or feature of interest and if and to what extent the proposed development might reasonably be expected to change the biological and physical characteristics of the feature or area.</td>
<td>The EIS identifies anticipated adverse impacts of a proposal on the significant area or feature and recommends ways to avoid or minimize these effects and enhance the area if feasible. Required if:  - The development is within or adjacent to a significant natural area or feature and is reasonably expected to have adverse effects on the area or feature as a result of changes in land use. Triggered by the following application types (if the above applies):  - Zoning By-law amendments  - Official Plan amendments  - Niagara Escarpment Plan amendments  - Parkway Belt West Plan amendments  - Development Permits  - Plans of Subdivision  - Severances  - Zoning Variances</td>
<td>The overall Planning Rationale requirement is non-discretionary.</td>
<td>Scope is discretionary and laid out in the Terms of Reference drafted by proponent following consultation with Conservation Halton. Scope determined by:  - The significance of natural features and function in the area of the proposal  - The availability of detailed sub-watershed studies and/or field work  - Specific boundaries, methods and protocols required  - The need for three season biophysical inventory</td>
<td>Each municipality/Region has developed criteria specific to their needs. The EIS should also meet the standards identified in the Greenbelt Act (2005), if applicable. The EIS should begin early in the development process when there is the greatest opportunity to design in harmony with the natural environment.</td>
<td>Density - the development should address density and site layout and make sure that it does not detrimentally affect its surroundings</td>
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<td>• Describe the Proposal  - The description of the proposal should identify and explain the development in relation to the existing natural features on the subject land and adjacent lands.</td>
<td>Vary widely based on complexity and scale of project.</td>
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<td>• Describing the Surrounding Environment  - A biophysical inventory should be conducted to describe the surrounding environment.</td>
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<td>• Identifying and Assessing the Impacts of the Proposal  - An assessment of the impacts a development will/may have on the size, diversity, health, connectivity, functionality and resilience of natural areas must be completed as part of the EIS.</td>
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<td>• Avoiding Impacts and Evaluating Alternative Mitigation Measures  - Constraints should be identified prior to the development plans.</td>
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<td>• Monitoring Plan  - Monitoring plans should be designed to measure the impacts of the development on natural areas over time.</td>
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<tr>
<td>• Recommendations and Conclusions  - Recommendation should be given based on the evaluation within the EIS.</td>
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<td>Study Name and Description</td>
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| Transportation Impact Study (City of Toronto) | A Transportation Impact Study establishes the merits and impacts of a development and assists in determining the justification for its approval. The study also helps to determine improvements to infrastructure, service upgrades and mitigation measures to reduce any negative impacts of a development and an appropriate travel demand management strategy. | The goal of a traffic impact study (TIS) is to assess the potential impact of traffic generated by a proposed development or redevelopment and to identify the roadway improvements required to ensure that the road network will operate safely and efficiently upon completion of the development. | May be required for:  
• Zoning By-law Amendment  
• Plans of Subdivision | Discretionary, but very commonly required. | Letter or report | None. | A Transportation Impact Study should include the following information:  
1. Location plan of the subject property.  
2. Property description.  
3. Owner/Consultant contact.  
4. Transportation context for horizon year and time periods for analysis.  
5. Estimate of travel demand generated by different development scenarios.  
7. Identification of transportation system improvements required to mitigate adverse impacts.  
8. Assessments of parking and access issues.  
9. Supporting data used in the analyses.  
Cost and Timing | Vary widely based on complexity and scale of project. | Street Connectivity – how is a accessible and walkable community supported  
• Road Network and Sidewalk Characteristics - how does the design of the road/sidewalks foster a sense of space and reduce the impact of the automobile on pedestrians and other users  
• Parking and Aesthetics - how is parking integrated into the development which positively impacts the surrounding environment  
• Service Proximity - what effect a development will have on municipal services. |
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<td>Community Services and Facilities Studies (City of Toronto)</td>
<td>A Community Services and Facilities (CS&amp;F) Study may be required by an applicant to assist in the identification of necessary levels of social infrastructure required to support the health, safety and well being of local residents.</td>
<td>The undertaking of Community Services and Facilities Studies allows for the identification of issues that exist within the study area and what improvements may be necessary to enhance the quality of life for area residents.</td>
<td>May be required for a proposal that:  • May have a significant impact on community services and facilities  • Is for the development of a new residential neighbourhood.</td>
<td>Discretionary, but very commonly required.</td>
<td>None.</td>
<td>The CS&amp;F Study is prepared by the applicant’s consultant. During pre-application consultation, planning staff work with the applicant’s consultant to determine the specific requirements of the Study based on the nature of the proposed application and the context of the study area.</td>
<td>A CS&amp;F Study contains specific information about demographics, community services and facilities that exist in a study area surrounding the development application.  • Inventory of services and facilities that exist in the study area for example:  • Maps of services and facilities serving the study area in which the development application is located.  • Profiles of services and facilities, for example, programs offered, size of facilities, demand and capacity of facilities and programs, and who is served by the service or facility (age groups, gender), as well as contact information for all services and facilities.  • Demographic profile of the study area.  <strong>Cost and Timing</strong>  Vary widely based on complexity and scale of project.</td>
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<tr>
<td>Sun/Shadow Study (City of Toronto)</td>
<td>A technical document that provides a visual model and written description of the impact of shadows cast by a proposed development on adjacent streets, parks and properties.</td>
<td>These studies are done to evaluate the impact of shadows at various times of day, through the year.</td>
<td>May be required for the following applications for developments over 20 m (6 storeys) in height:  • Official Plan Amendments  • Zoning By-law Amendments  • Site Plan Control applications (complex applications only)  May also be required for developments under 20 m if additional height is being applied for near shadow-sensitive areas.</td>
<td>Discretionary, but very commonly required.</td>
<td>None.</td>
<td>The applicant may be requested to submit a proposed and final shadow study. This takes the form of a report.</td>
<td>The applicant may be requested to submit a proposed and final shadow study.  • A letter summarizing the study and the sun/shadow impacts of the development.  • Images of sun/shadow tests using models  • Images of the sun and shadow situation for the existing context and with the proposal  • One digital copy of the development massing model.  <strong>Cost and Timing</strong>  Vary widely based on complexity and scale of project.</td>
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- **Service Proximity** - what effect a development will have on municipal services, their location and amount provided.

- **Human Scale** - how shadows and sun will affect the public realm.
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<thead>
<tr>
<th>Study Name and Description</th>
<th>Purpose and Intent</th>
<th>Triggers</th>
<th>How Common (if Discretionary)</th>
<th>Variance in Scope</th>
<th>Format</th>
<th>Required Resources, cost, time</th>
<th>Health Components (Elements from the Index)</th>
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<tr>
<td>Servicing Report</td>
<td>A study that evaluates the effect of a proposed change on municipal servicing infrastructure and watercourses.</td>
<td>The objective of a Servicing Report is to evaluate the effects of a proposed change in land use or development on the City’s municipal servicing infrastructure and watercourses.</td>
<td>Is required for: • Official Plan Amendments • Zoning By-law Amendments • Plans of Subdivision</td>
<td>The Servicing Report requirement is non-discretionary.</td>
<td>Varies widely based on complexity and scale of project.</td>
<td>• Service Proximity - what effect a development will have on municipal services.</td>
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<tr>
<td>Study Name and Description</td>
<td>Purpose and Intent</td>
<td>Triggers</td>
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| Noise Impact Study (Provincial) | This study presents information relating to the details of technical assessment and review of noise impact on planned sensitive land uses | The purpose of the detailed study is to assess the impact of all noise sources affecting the subject lands and determine the appropriate layout, design and required control measures. | May be triggered by any form of development submission. Feasibility Noise Studies may be required for developments where:  
- The sound levels resulting from surface transportation noise affecting the proposed lands exceed the noise criteria by more than 10 dBA.  
- The proposed lands are within 100 m from a freeway right-of-way or 50m from a provincial highway right-of-way.  
- The proposed lands are within 100 m from a Principal Main Railway Line right-of-way or 50 m from a Secondary Main Railway Line right-of-way. Detailed Noise Studies may be required for developments where:  
- The sound levels resulting from surface transportation noise affecting the proposed lands exceed the noise criteria by more than 5 dBA.  
- The proposed lands are within 500 m from a freeway right-of-way, 250 m from a provincial highway, or 100 m from the right-of-ways of other roads.  
- The proposed lands are within 500 m from a Principal Main Railway Line, 250 m from a Secondary Main Railway Line, or 100 m from other railway lines. | Discretionary, but very commonly required. Feasibility studies address the following:  
- Feasibility of the proposal in context of site design  
- Extent of control measures (such as barriers, etc.)  
- Site layout (positioning of roads and buildings, land use compatibility)  
- Identify additional studies needed  
- Timing associated with implementing of control measures Detailed Noise Studies address the following:  
- Impact of external noise affecting the subject area  
- Details of assessment methods  
- Recommend outdoor and indoor control measures | The study report should include details of assessment methods, a summary of the results and recommendations concerning required outdoor as well as indoor control measures. This background assessment should take the form of a report. | - Feasibility studies should be submitted with the initial proposal.  
- Noise impact studies should be prepared by a qualified individual, preferably a Professional Engineer with experience in environmental acoustics. The requirements for a Noise Impact Study include:  
- Site layout including the roadways and orientation of the buildings, as well as allow for consideration of the appropriate zoning including industrial, commercial, high, low and medium density residential use.  
- Alert the proponent and the approving agency of potential land use conflicts as well as determine the practicality and economic feasibility of physical noise control measures, in conjunction with the selected site design.  
- The study should provide a clear direction regarding the need for additional studies and the timing associated with the implementation of required control measures. | - Density - the development should address density and site layout that does not detrimentally affect noise on its surroundings  
- Land Use Mix - The mix of land use must not have detrimental noise affects on the surrounding environment. |
Appendix III
Appendix III: Interview Question/Response Summaries

The consultant team conducted a series of interviews with stakeholders to gain a sense of general support levels for the concept of a new study requirement, and seek advice for what directions it should or could take.

Interview subjects included planners, developers and public health professionals who would likely be directly involved in any such future practice. In total, 25 interviews were conducted, representing 13 planners, two developers, 11 public health officers and two private health consultants.

This Appendix provides a highly condensed summary of the responses received during stakeholder interviews. The responses are presented in the same order the questions were asked to stakeholders. As a condition of the interviews, stakeholders are to remain anonymous. However, the correlation between responses and professional sector (planning, development or public health) are indicated where relevant.

**QUESTION 1: To what extent are you as a (planner, developer, public health professional) supportive of implementing a mechanism to ensure that the health impacts of development are considered during the development approval process?**

There was broad support for linking planning for the built environment and health promotion among the planners and public health officials interviewed. One respondent argued that it would actually create an incentive for development by addressing the public health-related concerns of NIMBY’s.

Generally public health professionals were more supportive of a Health Background Study than other respondents interviewed. Public health officials highlighted the link between the built environment and planning as critical, and highly supported the concept as a potential tool to create meaningful and value-added change in how we think about and develop places.

Some planning officials, who also understood the value of healthy environments, noted that public health is to some extent already addressed in Official Plans and other planning policy documents, as well as in existing background studies already required by municipalities. One interviewee, who was particularly unsupportive of the project, believed health considerations are well embedded in Official Plan policy and did not see the value of an additional tool. Other planners were very supportive of this initiative, and cited the importance of such a study that takes into consideration the life of residents, not just development in terms of buildings and structure.

Overall, the majority of planners interviewed were unsure – with some outright dismissive – of the need for further tools and standards. The mechanisms by which such a study would be required were also discussed, with planners wary of holding developers to particular expectations. Developers interviewed were strongly opposed to any additional approval process mechanisms.

**QUESTION 2: To what extent is your department/organization interested in/supportive of integrating health considerations into planning decision-making?**

The views of planners and public health officials ranged from highly supportive to moderately supportive of integrating health considerations into planning decision making. Planners expressed the need for clear expectations to ensure that delays are minimized. The food security aspect of public health, and its connection to physical planning – particularly distances between residential areas and food retailers – was brought up. Others expressed concerns, regarding the measurement and evaluation of the relationship between built form and health. The view that the majority of development now occurring in some parts of the study area, particularly Toronto and Mississauga, is infill, and therefore have less impact on public health, was also expressed.

The extent to which both departments (public health and planning) could be integrated was pointed to by respondents in both departments. Before amalgamation in Toronto, public health and planning had a closer professional relationship, where public health played a more formal and integrated role in the planning approval process. Triggers were in place which identified development applications where public health support was needed. However, public health’s involvement focused primarily on environmental concerns rather than on design considerations.

The involvement of public health in planning and the planning process was questioned, with some respondents positive and some skeptical about increased communications between the departments. Skepticism was mainly attributed to the sense that current policy already covered health considerations and that further planning background studies were not required.

Developers were strongly opposed to the integration of
such considerations, and were concerned that they might significantly slow the development process and increase its cost.

**QUESTION 3: What are the possible mechanisms that could be used to assess potential health impacts of developments?**

Some respondents struggled with this question, but a number of suggestions were put forward including:

- Development application approval, possibly through a simple checklist for development proposals
- A Board of Health-led Health Impact Assessment
- The Environmental Assessment process
- The Toronto Green Standard – setting performance measures rather than assessment
- The use of the Peel Healthy Development Index as targets
- Through Secondary Plans
- Consultation with communities
- Academic literature
- Expert opinion
- Software programs (iplan) are being developed in the US. These should be available shortly and planning staff should be trained in their use.

The need for health requirements to be embedded in the development approval process was highlighted, as well as the need for increased communication between departments. One respondent discussed the requirements of vulnerable populations (i.e. children, elderly) when undertaking both policy and/or health studies.

Interviewees also noted that mechanisms used to assess potential health impacts of developments should also respond to the context of the area. Again the influence of infill development was raised, as this is the majority of development in Toronto and Mississauga. Respondents also indicated that the criteria developed for such a study would also play a role in the mechanisms used.

**QUESTION 4: At what stage of the development process should the health impacts be addressed?**

There was general consensus from respondents that health impacts should be assessed at the earliest stages in the development process. However, many respondents also thought that health considerations should be assessed throughout the development process to respond to changes and inform decisions as part of what they saw as an iterative process.

Many said that the guiding policies should be laid out in the Official Plan, and further enshrined in Secondary Plan and block-level plans. There seemed to be agreement that developers should be educated as to the requirements before putting forward their applications and that initial applications should be required to address compliance. The pre-consultation process was mentioned by planners as a tool for addressing such considerations.

**QUESTION 5: Should different study requirements be established for different types of development? If so, how and why?**

Respondents were split by this question. Some felt strongly that one regime should be applied to all applications, regardless of size and context, and that multiple systems would only confuse and alienate the public. While discretion should be used by planners in evaluating applications, these respondents argued that applying a uniform process would simplify the system.

Others argued that different requirements should exist for large greenfield and small infill development. Greenfield developments are likely to hold greater public health significance because they have wide and far-reaching effects on built form.

Alternatively some respondents took a middle ground, suggesting that there should be general requirements of health issues required for all development, however each development should be assessed in regards to its specific context with judgments made regarding the applicability of certain requirements.

A variety of triggers were suggested by respondents to categorize application types, including density, scale and context, impacts and inclusivity, and location.

- Density was suggested as a possible determinant, for example, the provision of gym or recreational facilities is a significant component of public health contribution for large multi-unit developments, but does not apply to low-rise developments.
- Issues of scale and context were also raised as significant factors. Land use was suggested as a basis for different requirements, as commercial and industrial developments having significantly different effects on public health than residential developments.
- The effect of development on a community and on vulnerable people within a community was also raised. People have different preferences of how they prefer to live, and it should be noted that the built environment affects people in different ways at different stages in their life. Development and health requirements need to consider these preferences and life stages when assessing health.
- Finally, geographic location was also brought up
by respondents. Some believed that the public health impacts of developments within significant nodes or corridors should require them to follow a different set of rules. It was suggested that developments could be scoped during the pre-consultation stage to identify context specific study requirements.

Ultimately respondents varied in their opinion concerning the requirements for different types of development, with no clear preference supported. Responses ranged amongst respondents from a preference for a simple and uniform processes, to context-dependant processes, depending on the development type.

**QUESTION 6: Should all types/forms of development and/or application types (OPA/Secondary Plan, Block Plan, Zoning, Subdivision, etc.) trigger the requirements for such a study? If no, what types/forms of development and/or application type do you feel should trigger potential study requirements?**

Once again, respondents were split by this question, indeed quite broadly this time. Some argued that public health requirements should be 'hard', and contained within Official Plan or bylaws. Developments would either pass or fail the test of meeting these requirements. Others agreed that all application types should trigger requirements for a study. Several respondents, primarily planners, preferred Secondary Plans as the level at which the study would be applied, while one preferred zoning.

Issues of scale were repeatedly cited by planners, with larger developments (i.e. Secondary Plan level) seen as having the greatest influence on public health. Here triggers of square footage and number of employees were suggested. Of note was the point of view of one respondent who identified the cumulative impact of many small developments on public health. This statement is particularly important considering that the context of most development in Toronto and Mississauga is infill rather than greenfield development.

Legal requirements, and what a municipality can request from developers was also discussed. The LEED criteria was mentioned as an example of standards that are not required by the Planning Act, and therefore can not be enforced. Understanding the policy parameters of health requirements is essential.

These responses appear to reflect two essential philosophical approaches by respondents. Some, motivated by a need for thoroughness, felt that more study across the board would be the best policy. Others, concerned about bogging down the development process, wished to make the system as simple and concise as possible. In this regard, it was suggested that large scale development should trigger a Health Background Study, however, as development progresses no further studies should be required.

**QUESTION 7: What elements/issues/considerations should a Health Background Study focus on or be included in the study's terms of reference?**

Respondents put forward a number of suggestions in response to this question:

- Access to food retail
- Access to health services
- Access to employment
- Walkability
- Cycling and pedestrian amenities
- Safety from crime (which encourages walking)
- Safety from accidents (such as separating schools and long-term care facilities from major transportation corridors)
- Recreation opportunities
- Access to green space (view and proximity)
- Community garden space
- Public spaces
- Pedestrian friendly areas
- Access to public transit
- Urban form and mix of uses
- Factors affecting disease and obesity
- Special program space for activities like community kitchens or markets, which raise awareness and support behavioural changes
- Environmental effects on public health (for example, effects of proposed industrial uses on air, soil and water quality)
- Factors affecting mental health
- Mobility considerations
- Urban heat island effect
- Climate change adaptation
- Conditions inside buildings
- Street layout and connectivity
- Density considerations
- Tree planting requirements
- Active transportation infrastructure
- Mix of housing type
- Protection from noise
- Disease and problems of obesity relating to different urban forms
- Background history of an area
- Analysis of surrounding neighbourhoods
- Character of the overall region
- Location and compatibility
- Risk analysis and magnitude
One planner interviewed suggested the that sheer magnitude of elements for consideration was overwhelming, instead it was suggested that the elements with the greatest impact should be focused on.

**QUESTION 8: What format should this study requirement take?**

As stated earlier, a number of stakeholders felt that the requirement should be based on the category of the development proposal (with more extensive studies required for larger developments). A few respondents felt that a checklist would be a simple and easily understood means of testing how well developments met the requirements. On the other hand, most argued that this was too simplistic and that a full-scale report should be undertaken to evaluate developments. While a checklist might serve as an initial terms of reference statement, they were skeptical about how well it could address the complicated issues associated with public health.

Many respondents mentioned the need for a Health Background Study to be integrated into the planning process. A stand-alone document was seen as a risk in achieving this goal, and a majority of respondents suggested integrating health requirements and assessment within other background studies.

An Environmental Assessment study was mentioned, however this format was recognized as perhaps not the most appropriate for all developments, especially those of a smaller scale. Interviewees noted that in addition to identifying health impacts, the development proponent should put forward mitigation strategies and be held accountable for their implementation throughout the various stages of development.

Interviewees noted that guidance would be required to address how influential such a study would be in planning decision-making. Regardless of the format of the Health Background Study (whether it is a simple checklist, stand-alone report or integrated document), to gain buy-in from planning staff, developers and the public, it is imperative that the Study results in improved development outcomes that contribute to better health.

**QUESTION 9: From your perspective as a (planner/developer/public health official), what challenges, if any, do you foresee with implementing a requirement for a Health Background Study?**

The number one concern expressed was the difficulty in engaging stakeholders in the process and building political support for it. The involvement of developers, landowners and the general public as well as getting clear direction from Council was seen as important. This support was closely tied to the idea of education, and communicating the significance of this issue to individuals and groups who may not currently see it. The issue of the public’s response to health study outcomes was also raised as a potential issue when marketing developments.

As noted throughout this interview summary, an additional background report was questioned in regards to its feasibility, specifically in insuring that requirements would not be so onerous as to prevent development from occurring altogether. (The highly negative responses given by developers during these interviews appear to confirm the current presence of a political divide).

The difficulty in measuring some public health indicators, the criteria they are measured against, and the complication of developing uniform regulations for a diverse array of developments and built forms was also seen as challenge. One respondent expressed particular concern about difficulties institutions may face in complying with more stringent public health requirements in the development approval process. For example, schools, hospitals and places of worship today strongly follow models of geographic centralization. The imposition of walkable distance requirements may substantially draw in these organizations and requirements to dramatically rethink their strategies.

Integrating a comprehensive assessment tool also involves challenges to industry, shifting discourse, and engaging different disciplines and cultures. Challenges relating to cost, expertise and resources were specifically identified by respondents. These challenges may result in unintended outcomes including pushback from all involved (planners, public health officers and developers). A lack of expertise in this area was discussed, as experts in public health may be required as part of an assessment. Training planners or drawing these experts from public health staff may strain resources and result in increased costs to both of these departments.

Finally, outcomes must demonstrate added value and best practice and examples should be provided to demonstrate this. Illustrating best practice will fuel public demand, engage developers and support planners in their decisions. Ultimately the ‘newness’ of the concept is a challenge in itself, as planners are not used to examining health issues. It will take time to allow for planners to become more comfortable with these considerations and change behavior.