

STAFF REPORT ACTION REQUIRED

Creating a Healthier Toronto Through the Official Plan

Date:	September 7, 2012
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

The City of Toronto is conducting a five-year review of the Toronto Official Plan (OP) that came into effect in 2006. The OP provides guidance for land-use planning decisions that influence how growth in Toronto will take place between now and 2031. Currently, the City Planning Division is in the process of identifying potential changes to the OP based on feedback received from consultation, research findings and Council directives. A final report on the OP Review including recommendations for amendments to the OP is scheduled to go before Council in 2013.

The Ontario Public Health Standards mandates board of health to work with municipalities to support healthy public policies related to the built environment. This report provides a public health perspective on the OP and identifies areas that could be strengthened so as to ensure that Toronto will grow and evolve in a way that fosters health for all residents.

Land-use planning and the built environment have a direct impact on factors, such as employment, social support networks, and the physical and social environments that influence health and health equity. Reducing health inequities through land-use planning involves improving opportunities for all people to make healthy choices, and reducing exposure to circumstances and substances that lead to poor health outcomes. Land-use planning decisions based on health and equity principles will help create environments that foster the growth of healthy children and productive adults needed for the long-term prosperity of Toronto.

The current OP already includes policies that support both health and equity. However, there are some areas where the OP could give greater direction so that development in Toronto will more fully support health and wellbeing. This report provides recommendations for strengthening health and equity considerations in various policies in

the OP with a focus on improving health promoting features in apartment tower neighbourhoods, access to affordable housing in all areas of the city and enhancing policies related to health protection and promotion.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

- 1. the Board of Health forward this report to the Chief Planner and Executive Director of City Planning for consideration in the Five-Year Official Plan Review;
- 2. the Board of Health request the Medical Officer of Health to collaborate with the Chief Planner and Executive Director of City Planning to:
 - a) strengthen policy directives in the Official Plan for healthy built environment features that are outlined in this report, especially in low growth, low income apartment tower neighbourhoods, within areas characterized as "stable neighbourhoods";
 - b) incorporate elements of the Toronto Food Strategy in the Official Plan by including:
 - i. healthy food retail as a neighbourhood amenity, and
 - ii. considering sources of healthy food as a key component in revitalization strategies for low growth, low income neighbourhoods; and
 - c) enhance policies in the Official Plan to support:
 - i. active transportation and transit use by focussing on improving walkability, bike-ability and access to transit in areas of Toronto that do not support active modes of transportation;
 - ii. provision of affordable housing for families with children in all areas of the City;
 - iii. building community resilience to extreme weather events; and
 - iv. the provision of green space including parks, trails and outdoor recreation facilities in residential areas of the City where there is a limited supply of parks and opens spaces within easy walking distance;
- 3. the Medical Officer of Health report to the Board of Health on progress made in enhancing health and health equity in Official Plan policies, as outlined in this report, prior to submission of the final report on the Five-Year Official Plan Review from the Planning and Growth Management Committee to Council in 2013; and

4. the Board of Health urge the Ontario Minister of Municipal Affairs and Housing to amend the Planning Act to enable municipalities to implement inclusionary housing as a mechanism for the provision of affordable housing, which will support Toronto's Official Plan objective to provide a full range of housing, in terms of form, tenure, and affordability across Toronto and within neighbourhoods.

Financial Impact

There are no financial impacts from the adoption of this report.

DECISION HISTORY

At its meeting of April 2, 2012, the Board of Health (BOH) received the report *Healthy Toronto by Design: Current Research and Policy Initiatives for a Healthy Built Environment* which provided an overview of research and policy work on the built environment being done by Toronto Public Health (TPH) in partnership with other City divisions. This report noted that the Medical Officer of Health (MOH) would report to the Board of Health on these initiatives individually as they are completed. (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL12.1).

At its meeting of May 30, 2011, the Planning and Growth Management Committee adopted a consultation strategy for the five-year review of the Official Plan and the municipal comprehensive review as outlined in the report available at http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PG5.2.

At its meeting of April 2, 2012, the BOH forwarded the staff report *Walkable City: Neighbourhood Design and Preferences, Travel Choices and Health* (March 15, 2012) to the Chief Planner and Executive Officer of City Planning to support Official Plan policies and inform all planning studies in areas of Toronto with low walkability. (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL12.2)

At its meeting of April 30, 2012, the BOH forwarded the *Road to Health* (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL13.1) to the Chief Planner and Executive Director of City Planning to support Official Plan policies and inform all planning studies in areas of Toronto with low bike-ability and walkability.

ISSUE BACKGROUND

Public health units and boards of health are required by the Ontario Public Health Standards 2008 (OPHS) to work with municipalities to support the development of healthy public policies regarding built environment, and to create or enhance supportive environments, as outlined in the chronic disease prevention and the environmental health program standards. As evidence linking the built environment to health outcomes continues to grow, public health units in Ontario and other jurisdictions across Canada are increasingly involved with planning departments to advocate for better integration of health-based principles into land-use planning policy documents. There is a clear link between land use patterns and factors that determine the health of people. Physical activity, air quality, access to affordable housing and nutritious food, to name a few, are

all linked to land use patterns and characteristics of the built form. Consideration of a poorly built environment as a risk factor for adverse health outcomes is an important step towards addressing health inequities. Increase in the rates of obesity related diseases such as type 2 diabetes, cardiovascular disease, and hypertension, are related to behavioural risk factors that are associated with "obesogenic" environments – environments that promote obesity.

The Healthy Toronto by Design report submitted to the Board in October 2011 describes the relationships and interactions of social, economic, and environmental factors in determining population health and health equity in Toronto. The report describes many of the health challenges faced by Torontonians, how the built environment influences health outcomes, and the means by which the City's agencies, boards and divisions can create conditions to improve the health of all Torontonians and reduce inequities. Toronto Public Health is collaborating with City Planning and other City divisions on issues and initiatives related to the built environment, with the intent of strengthening health and equity considerations in decision-making and program implementation. Toronto Public Health has undertaken a number of research initiatives in partnership with other City divisions and external stakeholders such as United Way of Toronto and The Heart and Stroke Foundation of Canada to better understand how the built environment influences health in Toronto (see Healthy Toronto by Design: Current Research and Policy Initiatives for a Healthy Built Environment http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL12.1).

In March 2012, TPH and City Planning co-hosted a roundtable (*Planning a Healthier Toronto*, http://www.toronto.ca/health/hphe/built_environment.htm) to review the OP using a health and health equity lens. The roundtable workshop brought together leaders in city planning and public health as well as representatives and leaders from the City's Transportation Services, community organizations, academia, and federal and provincial health agencies. A number of ideas on how to build a healthier and more equitable Toronto through policies that facilitate local employment, walkable neighbourhoods, active transportation, access to food, affordable housing, and inclusivity were discussed. Toronto Public Health staff reviewed the OP using the TPH Health Impact Assessment

This report was prepared in consultation with City Planning. It identifies where health and equity principles could be better integrated in OP policies to make it a more effective tool to improve the health and well-being of the people of Toronto.

(HIA) tool as a guide. The review identified a number of areas where health and equity

The Toronto Official Plan and the Five Year Review Process

The Toronto Official Plan (OP) is a statutory document under the authority of the Ontario Planning Act (1990). It is a policy document to manage growth and development in the City. The Planning Act requires the OP contain "goals, objectives and policies established primarily to manage and direct physical change and the effects on the social, economic and natural environment of the municipality." In alignment with Toronto City Council's Strategic Plan, the OP sets out policies and objectives for land-use planning

could be better integrated into the policy statements.

based on the concept of sustainability. The OP lists the following principles for policy making to build a successful Toronto: diversity; opportunity; beauty; connectivity; stewardship; and leadership. Toronto's OP was adopted by City Council in 2002 and came into force in 2006. City of Toronto by-laws must conform to the policies in the OP.

The Planning Act requires that the OP be reviewed at least every five years to ensure its policies remain relevant to the future needs of communities and to provincial growth management goals and policies. The intent of the review process is to identify which OP policies need to be updated, deleted, or revised and to add new policies in order to comply with provincial legislation, support civic policy initiatives and address new findings relevant to the future needs of communities. Revisions to the OP must conform to all provincial plans, policy statements and legislation. As such, it must meet the policy requirements of the *Provincial Policy Statement* issued under the Planning Act and *The Growth Plan for the Greater Golden Horseshoe* issued under the authority of the Places to Grow Act, 2005.

City Planning staff have organized the OP review process into three stages: Stage 1, which was completed in 2011, involved public consultations and information gathering; Stage 2, which is in progress, involves identifying directions and potential changes to the OP; and Stage 3 which will entail the preparation of draft amendments to the OP for consideration by City Council. The work involved in Stage 2 has been organized by thematic areas based on statutory requirements of provincial legislation (Phase A) and non-statutory matters arising from council directives, consultations and staff review (Phase B). The issues addressed in this report will mainly be covered in Phase B which is anticipated to be completed in 2013.

City Council will hold a special public meeting and accept written submissions to hear comments regarding revisions to the OP prior to adopting amendments recommended by the Chief Planner and Executive Director of City Planning. The "Municipal Comprehensive Review", which deals with the issue of converting lands within employment areas to non-employment uses, is being conducted concurrently with the five-year review. A final report on the review is scheduled to be brought forward to City Council in 2013. Updates on the OP five year review process are posted on the City of Toronto website (http://www.toronto.ca/opreview).

COMMENTS

The current OP sets out policies to improve transit, protect green spaces and the urban forest, manage air quality, reduce non-point-source water pollution from wet weather flow, and foster environmentally sustainable construction of structures and facilities for the redevelopment of the built environment. These policies need to be maintained or enhanced in amendments to the OP. The OP aligns with Toronto Public Health's mission of reducing health inequalities and improving the health of all Torontonians in a number of key areas. The current OP already includes many principles and policies that promote health and support increased equity and these should be retained. The comments below identify enhancements that would strengthen the OP's ability to promote health and reduce health inequities in Toronto.

Equity-Focused Planning Will Build a Healthy and Prosperous Toronto

The health impacts of disadvantage within Toronto are well documented. In his 2008 report, *Unequal City: Income and Health Inequalities in Toronto* (http://www.toronto.ca/health/map/pdf/unequalcity_20081016.pdf), the Medical Officer of Health provided evidence that a greater proportion of people living with low income experience greater risk factors for illness, higher rates of disease, and death at an earlier age. Torontonians have unequal and unfair access to resources and services within the City, and the gap between our best- and worst-off residents is growing. These inequities prevent certain groups of residents from receiving the full social, economic and health benefits of living in Toronto.

Groups most likely to be disadvantaged within Toronto include, among others, people living in poverty, racialized populations, new immigrants, and people with disabilities. These groups are now more concentrated in certain areas of the city, including the inner suburbs. This marginalization is the result of multiple factors including poverty, limited employment opportunities, and lack of affordable housing. Planning policies can contribute to reduced marginalization and strengthened equity in Toronto. An equity approach to planning policies will help make decisions and resource allocation support all individuals and communities with a focus on those with greatest needs to maximize the economic, health, and social benefits in Toronto.

The OP recognizes that equity, diversity, and inclusion are key components in the development of a sustainable city. The vision outlined in Section 1.2 of the OP captures many of the objectives that foster equity, prosperity and sustainable land-use policies such as: employment opportunities; access to affordable housing, including for families; access to public transportation; parks and green spaces; and a well developed public realm and streets. However, these principles could be more consistently integrated into the OP's policies as discussed below. Policies within the OP can help mitigate the negative consequences of poverty and income disparities by ensuring that all people regardless of where they live, or would like to live, have equitable access to the benefits of being residents of Toronto.

Achieving these objectives benefits more than just health. It will improve the social fabric, build greater social inclusion and community cohesion. Together they will allow the City to meet its full economic potential by being more attractive to new investments, businesses and residents.

Revitalization Policies for Low Growth, Low Income Areas in "Stable Neighbourhoods"

The OP identifies the following areas as "growth areas" in Toronto: *Downtown* including *Central Waterfront*, *Avenues*, *Centres* and *Employment Districts*. Land use designations of *Neighbourhoods* and *Apartment Neighbourhoods* are considered "stable neighbourhoods" whereby policies in the OP direct that development in these neighbourhoods should "respect and reinforce the existing physical character of buildings, streetscapes and open space patterns in these areas" (Section 2.3.1, Policy 1).

OP policies in Sections 2 and 4 also acknowledge the need for stable neighbourhoods to evolve with the needs of the communities.

Section 2 of the OP focuses on building healthy neighbourhoods in areas that are not targeted for population growth – the low growth areas that are located in stable neighbourhoods. The United Way of Toronto Poverty by Postal Code 2: Vertical Poverty (2011), which was presented to the BOH at its March 1, 2011 meeting, found that there is a growing concentration of poverty in the inner suburbs, particularly in apartment towers (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.HL2.1). These findings support the evidence provided by David Hulchanski (2010) The Three Cities Within Toronto – Income Polarization Among Toronto's Neighbourhoods, 1970-2005, that demonstrates increasing polarization and segregation of Toronto's neighbourhoods based on income and other characteristics such as racialized groups and number of immigrants. The Three Cities within Toronto report can be found at http://www.urbancentre.utoronto.ca/pdfs/curp/tnrn/Three-Cities-Within-Toronto-2010-Final.pdf. People living in low-income neighbourhoods experience greater health risk factors and higher rates of disease as illustrated in the report *Unequal City*. It is recommended that the OP add new policies that focus on improving health beneficial features to low growth, low income neighbourhoods lacking services and amenities such as: access to parks and green space; food outlets for nutritious foods; increasing walkability; traffic calming measures; improved public transit services; indoor and outdoor amenities; and protection from extreme heat.

Apartment towers that house low-income families and which are in urgent need of improvements to a number of services, amenities and housing conditions that influence the health of those living in these towers, are frequently found in the land use areas that are designated stable neighbourhoods. Toronto Public Health supports the initiatives of the Tower Renewal Office on community renewal and has been actively engaged on a number of projects. The MOH is also presenting the report *Planning Healthier Apartment Neighbourhoods* (see:

http://app.toronto.ca/tmmis/decisionBodyProfile.do?function=doPrepare&decisionBodyId=321#Meeting-2012.HL16) to the Board in September 2012. This second report explores ways in which features of the built environment in apartment neighbourhoods can be changed to create healthier communities. *Planning Healthier Apartment Neighbourhoods* focuses on the role played by zoning by-laws in supporting healthy public policies. Toronto Public Health and City Planning staff are considering co-hosting a roundtable meeting with stakeholders in 2013 to discuss how apartment neighbourhood can be revitalized to building healthier communities.

Food-friendly Neighbourhoods

The OP review provides a unique opportunity to further establish the position of food as a key issue for consideration in managing and guiding growth in the GTA. The built environment influences where we buy food and what we eat. As part of the Toronto Food Strategy, TPH has undertaken a number of initiatives to encourage a health-focused food system. Such a system offers affordable, nutritious food in places that are easy to get to by all modes of transportation, including walking. Preliminary data collected by TPH

show that many neighbourhoods with high concentrations of low income households are far from supermarkets. Improving access to healthy foods in these neighbourhoods should be a priority.

There are several relevant sections of the OP which can be enhanced to reflect the City's commitment to a healthy and secure food system. This commitment can be established in the introduction of the OP through the addition of wording in Section 1.2 that integrates food as one the "Principles for a Successful Toronto".

In 2008, the Board directed the MOH to spearhead a Toronto Food Strategy, and in February 2010 endorsed the actions proposed in the *Cultivating Food Connections: Toward a Healthy and Sustainable Food System for Toronto* report, as prepared by Toronto Food Strategy (see

http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.HL28.1). It is recommended that Section 1.3 of the OP refer to the Food Charter and the Toronto Food Strategy. It is also recommended that statements supporting convenient access to healthy food and urban food production be added to this section.

Urban growth, at the regional level, is addressed in Section 2. It is recommended this section include a statement that provides support for stronger connections between producers and consumers within a strong regional food system. For the sub-sections dealing with Healthy Neighbourhoods, Transportation and Community Service Strategies, the language will need to be altered to support food security, including access to healthy food. The OP should also amend or add language in the sections dealing with Healthy Neighbourhoods that would support urban food production, waste reduction through composting, and related community food initiatives.

Affordable Housing is a Priority

Public health research shows that good housing is essential for health. Housing influences access to employment, education, and a number of other health promoting opportunities. When low-income families spend a majority of their income on housing, other factors that promote health, such as nutritious food, education and good child care, become unaffordable. As demonstrated in the reports, *Poverty by Postal Code 2* and *The Three Cities within Toronto*, Torontonians are experiencing decreasing access to affordable housing, deterioration in the housing stock, particularly in apartment tower neighbourhoods, and growing geographic polarization, whereby people living on low incomes are increasingly pushed to the peripheries of the city in their efforts to find affordable housing.

The OP recognizes that adequate and affordable housing is a basic requirement for everyone and Section 3 of the OP sets policies related to affordable rental and ownership housing. This section could be strengthened by including policies that require health promoting enhancements to affordable rental housing, such as the provision of and improvements to common areas for recreational purposes or social gatherings, as well as park amenities. In addition, directives on creation of walking and cycling trails to connect residential buildings within a property and between properties and policies that guide the building of safe active transportation infrastructure will support age-sensitive mobility, foster

community engagement among children, youth, adults and seniors, and provide opportunities to build community cohesion.

The OP sets out in its policies that a full range of housing forms, tenures, and affordability must be maintained and built throughout the City of Toronto and the region. Development in the *Downtown*, *Centres*, *Avenues*, *and Neighbourhoods* need to meet these policies for mixed housing forms, tenures, and affordability, including rental housing for families with children and multi-family households. Policies to encourage development of units for households with children in the *Downtown* has been referred by Council (2009) for consideration in the Review of the OP (see staff report to Planning and Growth Management Committee (May 10, 2011) available at http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PG5.2.). Toronto Public Health supports the initiative to include households suitable for children in the downtown and recommends that a certain proportion of housing is designated for low income families (see policies in Sections 2.2.1 and 3.2.1 of the OP).

The City of Vancouver uses negotiable inclusionary housing policies to require that 20% of units in new developments be affordable to low income households. Experts in urban planning, and participants of the *Planning for a Healthier Toronto* roundtable consider inclusionary housing (also known as inclusionary zoning) an important policy tool to make more affordable housing available in new developments. Such a mechanism could require high growth neighbourhoods to include affordable housing for people on low-income and for example, allow Toronto to require that the tower construction occurring downtown include a certain portion of affordable housing. *The Three Cities within Toronto* report also recommended inclusionary zoning as a useful mechanism to slow down and reverse segregation of the city by income.

Currently the Planning Act does not provide the required legal authority for municipalities in Ontario to mandate inclusionary affordable housing policies. To address this gap, the report *Poverty by Postal Code 2*, which was received and supported in principle by the Board at its meeting of March 1, 2011 meeting, calls for the Province to enable municipalities to mandate inclusionary zoning for provision of affordable housing.

A Transportation System that Facilitates Walking, Cycling, and Transit Will Improve Health

The ways in which people are able to move around the city impacts their health and the environment. Land use patterns influence health outcomes such as incidence of traffic-related injuries, respiratory and cardiac illnesses related to air quality, and in meeting health objectives such as physical activity, social cohesion and well-being. In the 2007 report *Air Pollution Burden of Illness from Traffic in Toronto*, TPH estimated that traffic related pollution caused about 440 premature deaths and 1,700 hospitalizations each year in Toronto. High automobile traffic in areas where people live or work has been linked to an increase in air pollution related illnesses in these areas, especially, among children. As an additional measure to improve air quality, transportation policy directions in the OP

could encourage that new and upgrades to transit systems adopt *least polluting* technologies (e.g. electric vehicles).

Toronto Public Health is actively promoting physical activity, but these health promotion activities alone will not produce the desired results. Characteristics of the built environment can facilitate the desired behaviour changes by making cycling, walking or other active modes of transport an easy choice. It is therefore important to ensure that all areas of the city incorporate features that integrate pedestrian and cycling infrastructure into the street and neigbourhood, specifically sidewalks and bike lanes features that support active transportation. Policies in all of OP land-use designations need to specifically support the inclusion of active transportation features.

The OP has set goals to increase active transportation and transit-use across Toronto and decrease dependency on private automobiles. The 2012 TPH report *The Walkable City* shows that many areas outside the downtown core of the City do not support or encourage walking as a means of transportation. It also shows that many low-income neighbourhoods are found in less walkable areas of the city. In order to reduce the gap in opportunities for walking and cycling among Toronto neighbourhoods so that all Torontonians have the opportunity to experience health benefits from physical activity related to active transportation, the OP needs to include policies that focus on improving walking and cycling not only in areas where growth will occur but also in areas that are not designated as *growth areas* or where it is not feasible to construct new streets. *The Walkable City* report proposes ways to make built up neighbourhoods more walkable and transit-supportive. In April, 2012, the BOH forwarded this report to the Chief Planner for consideration during the OP review process.

Evidence shows that physical activity related to walking increases when streets and communities are built to encourage walking for utilitarian purposes. Sections 2 and 4 of the OP contain policy and non-policy text that make a commitment to create infrastructure to encourage walking by providing safe, direct routes to schools, transit and recreation areas. While it is important to maintain these commitments to provide walkable environments for specific purposes, the OP should expand this with a reference to the ability to do day-to-day errands and include close access to goods and services in these policies.

Complete Streets provide safe, equal access to all modes of transportation for all people, including the most vulnerable, equal opportunities to access services and facilities and reduction in greenhouse gas emissions. Streets that are designed based on these principles will provide an environment more favourable to active modes of transport, reduce traffic noise and transportation related injuries. The "Complete Streets" concept is adopted by the OP in its policies related to the development of *new* streets (Chapters 2 and 3 of the OP). However, the requirement for including these features in "stable neighbourhoods" is weak. The OP would be strengthened by adding policies requiring the installation or enhancement of features such as lower speed limits and other traffic calming measures, bike ways and sidewalks to existing streets.

Planning Healthy Connections to Work

Toronto data shows a clear link between income and health, illustrating that the health status of individuals improves with every increase in income level (*Unequal City*, 2008). Quality of housing, access to nutritious food, and higher education are some of the determinants of health associated with income. Further, meaningful employment has benefits for physical and mental health and well-being, and provides a sense of purpose and social connection.

According to the Toronto Board of Trade, the average daily commute for workers in Toronto is eighty minutes, which is compounded by poor options for public transit and active transportation. Traffic congestion is a major problem that also results in economic, environmental, social and health costs. Traffic congestion and long commute times can be reduced through enhanced public transportation, improving service levels in areas that are under-served, making it affordable for all, and reducing the difference in travel time between public transit and car travel.

Section 2 of the OP sets out policies related to integrating land use and transportation. Particularly, they address the need to make employment areas accessible by means other than automobile use with specific policy directives to support and encourage transit use and creating safe and attractive conditions to encourage walking and cycling. It is recommended that the OP add policies that explicitly address the need in Toronto's inner suburbs to have public transit service that is affordable, frequent and with good connectivity to employment areas including *downtown*. In addition to increasing accessibility to transit, affordable travel options can be made available by improving infrastructure enabling walking and cycling to workplaces. Creating walkways, sidewalks, and bike lanes throughout the city including in *Employment Areas* where feasible, will encourage active transportation and decrease dependency on vehicle use.

The statements "Toronto has only one downtown" and that it is "where much of our future will be shaped" in Section 2.2.1 is of significance to all Torontonians, especially, to those living in the inner suburbs removed from the downtown core. Access to the wealth of employment, education, culture and services offered downtown can be made more physically accessible to those from the inner suburbs by making transit trips more convenient with reduced commute times and better connectivity. Policies in Section 2 are clearly directed toward improving TTC and GO transit access to downtown. It is recommended that this section also provide policy text that links affordability and accessibility to transit; and availability of safe bikeways from the suburbs to downtown employment and other services such as education facilities that influence health.

Access to Green Space

Public green spaces and parks provide an affordable place for people to carry out health promoting activities such as exercise, relaxation and social interaction. Physical activity is especially important for children's healthy growth and development. Green spaces also provide a calming environment and an environment for social gatherings, factors that help relieve mental stress. Integration of green space in community design increases the likelihood people, especially children, will participate in outdoor activities. Trees and shade cools the

air and provides relief from heat and help mitigate the impact of increasing intensity, duration and frequency of extreme heat events. It also reduces energy use for the purposes of cooling and heating buildings. Vegetation in parks and green spaces contribute to improving air quality by removing pollutants in the air and reducing energy use.

Toronto is recognized as a city of parks and green space. However, as described in a previous report to the BOH at its November 21, 2011 meeting (report found at http://www.toronto.ca/legdocs/mmis/2011/hl/bgrd/backgroundfile-42233.pdf) many low income neighbourhoods have little green space and parkland within easy walking distance. These are areas in Toronto where the availability of green space and park amenities should be improved as a priority.

The OP identifies the need to maintain and enhance natural vegetation in designing streets. This requirement could be enhanced in Sections 2.3 and 3.1 by requiring the integration of natural green space in the public realm including public meeting places, commercial areas such as shopping centres and associated parking lots, and within the property of multi-residential buildings.

Community Resilience to Climate Change

Extreme weather events related to climate change will have an impact on Toronto, but they will not affect everyone equally. Among others, people who live in inadequate housing conditions, young children, the elderly, people with disabilities, and the poor who do not have the resources to protect themselves from hazards such as storms, flooding, power outages, and unsafe indoor air temperatures due to extreme heat and cold, are most vulnerable to the health impact of weather related incidents. The built environment plays a significant role in a community's capacity, and an individual's ability, to cope with and withstand the adverse health risks associated with extreme weather events such as extreme heat and intense rainfall. As reported at the Planning and Growth Management Committee meeting on May 30, 2011, City Planning Division is considering the implementation of elements of the *Climate Change Plan and the Sustainable Energy Program* in its 5 Year Review process (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PG5.2.). In addition, it is suggested that the following aspects related to human health, climate change, and the built environment should be considered in the review process.

Adverse health effects associated with exposure to extreme heat can be reduced by built environment characteristics such as natural and constructed shade in public spaces and high-rise apartment neighbourhoods; enhancing community and neighbourhood amenities to include easy access to shelter from weather related hazards (access to cool environments during extreme heat, for example); and a built form that facilitates air movement between tall buildings and provides purpose-built shade.

High density urban areas, such as Toronto, experience warmer temperatures because of the "urban heat island effect" resulting from the presence of extensive heat-absorbing surfaces such as pavements, asphalt and concrete surfaces, and a lack of greenery to provide cooling. The Toronto Green Standard, the City's Green Roofs Bylaw and other initiatives identified in the OP help reduce the urban heat island effect. The Toronto Green Standard, for example, requires new development to incorporate sustainable development measures such as shading the hard surfaces of building sites and green roofs (where not subject to the Green Roofs Bylaw) at City owned facilities and applicable private sector development. These initiatives can be supplemented by adding policy objectives calling for an increase in usable green space within easy walking distance from homes and adopting the principles of shade contained in the City's *Shade Guidelines*. (See www.toronto.ca/health/resources/tcpc/shade_guidelines.htm). It is also recommended that Section 4 of the OP addresses the need for purpose built shade in playgrounds and water play areas that do not have natural shade.

In its 2011 report *Protecting Vulnerable People from Health Impacts of Extreme Heat* (http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.HL6.3) TPH identified areas in Toronto that could be targeted for enhancements to the built form to cool down surface temperatures by providing natural or purpose built shade. The OP could identify these priority areas for improvement to amenities in parks and opens spaces.

Conclusion

Current OP policies are generally supportive of actions taken by TPH to reduce health inequalities and improve health. Recent Toronto-specific findings on how the built environment and housing conditions affect the health of Torontonians and contribute to the existing health disparities among its neighbourhoods, demonstrate ways to strengthen the health component of city planning policies. As identified in this report, there are several opportunities for enhancing health and equity considerations in the OP as part of the five Year Review process. The MOH will report to the BOH in 2013 on progress of the work done to incorporate health-focussed recommendations in the OP.

CONTACT

Monica Campbell
Director, Healthy Public Policy
Toronto Public Health

Phone: 416-392-7463

Email: mcampbe2@toronto.ca

Sudha Sabanadesan

Research Consultant, Healthy Public Policy

Toronto Public Health Phone: 416-338- 338-8143 Email: ssabana@toronto.ca

SIGNATURE

Dr. David McKeown Medical Officer of Health