

**Improving Health and Health Equity through the
Toronto Parks Plan**

Date:	November 3, 2011
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

Toronto Parks Forestry and Recreation (PF&R) is developing a comprehensive plan to guide decision-making in the acquisition, development, management and operation of Toronto's system of public parkland. The process will include a review of current parkland and parks-based programs and services, as well as public and stakeholder consultations in the Fall of 2011. The process will be guided by seven principles adopted by City Council in 2010. The plan will propose goals and objectives for park services for the next five years to meet the diverse needs of Toronto residents.

The purpose of this report is to review the role of parks in promoting health with specific emphasis on how the Parks Plan might also contribute to reducing health inequities. Access to green space ensures good health in many ways. Abundant, safe and accessible parks and trails support the health of our city and all its residents. The parks and trails system plays an important role in reducing key risk factors for chronic disease and improving overall mental health and well-being. Parks build healthy communities by providing a venue for social interaction. In addition, trees and other vegetation in parks and trails improve air quality and provide shade. The Parks Plan provides an opportunity to be intentional, strategic and explicit about Toronto parks as anchors of healthy, vibrant communities and to contribute to reducing health inequities.

TPH encourages PF&R to consider the needs of individuals and communities that experience higher rates of poverty and other health risk factors when developing the Parks Plan. Specific attention should be directed to the provision of park space and related amenities such as sports fields, play structures, urban agriculture and other food-related activities in underserved low-income areas.

RECOMMENDATIONS

The Medical Officer of Health recommends that the Board of Health:

1. Affirm the importance of the development of a renewed Parks Plan by the Parks, Forestry and Recreation Division, given that the parks and trails system is an important health-supporting aspect of Toronto's physical environment and is a key driver in meeting the City's overall goals of environmental sustainability;
2. Request the General Manager, Parks, Forestry and Recreation, in collaboration with the Medical Officer of Health, to include the following strategies to improve health and reduce health inequities in the development and implementation of the Parks Plan:
 - a) Alongside the "three lenses" approach set out in the 2001 Parks Acquisition Strategic Directions Report, pursue opportunities to acquire park space within reasonable walking distance of neighbourhoods with higher concentrations of low income and higher health risk;
 - b) Plan development and upgrades in existing parks to ensure amenities are available to communities where there is greatest need based on rates of low income and other relevant health indicators such as high rates of diabetes;
 - c) Plan the incremental provision of shade through tree planting and shade structures in existing parks located in areas with high concentrations of residents most vulnerable to the health effects of extreme heat; and
 - d) Plan enhancements in parks located in low income neighbourhoods that support local food infrastructure and greater access to affordable and nutritious food.

Financial Impact

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

DECISION HISTORY

In 2004, City Council approved the PF&R strategic plan, "Our Common Grounds". PF&R obtained Council approval to develop two service plans, the Recreation Service Plan and the Parks Plan.

<http://www.toronto.ca/legdocs/2004/agendas/council/cc040720/edp5rpt/cl002.pdf>

At its meeting of February 22, 2010, the Parks and Environment Committee approved the development of a multi-year Parks Plan, to be based on seven guiding principles.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.PE28.3>

At its meeting of July 12, 2011, City Council approved a public and stakeholder consultation strategy, outlining the methods to engage the public and diverse stakeholder groups in providing input into the development of the Parks Plan.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PE5.2>

In November 2001, City Council approved the Parkland Acquisition Strategic Directions Report (2001) which guides Parks, Forestry and Recreation staff in parkland acquisition decision-making.

<http://www.toronto.ca/legdocs/2001/agendas/committees/edp/edp011022/it020.pdf>

ISSUE BACKGROUND

In 2004, Parks, Forestry and Recreation released the strategic plan, "Our Common Grounds". This plan presented a vision for Toronto as the "city within a park", where diverse communities come together on "our common grounds", defined as parks, trails, urban forests, and recreation facilities. "Our Common Grounds" identified three key "streams" as the basis for future priority setting and service planning in the parks and recreation systems: environmental stewardship; child and youth development; and, lifelong active living.

One of the many recommendations in the strategic plan was to develop a "Parks Renaissance Strategy", which formed the basis for the development of a comprehensive Parks Plan. The Parks Plan is intended to guide decision-making in the acquisition, development, management and operation of Toronto's system of public parkland. There are seven guiding principles underpinning the Plan: Parks and Trails as City Infrastructure; Equitable Access for All Residents; Nature in the City; Place Making; Supporting a Diversity of Uses; Community Engagement and Partnerships; and Environmental Goals and Practices. While the promotion of health is not explicit among the guiding principles, many of the objectives identified overlap with and support health enhancement in Toronto.

Parks, Forestry and Recreation has embarked on a process to develop the Parks Plan. They will begin by reviewing the current inventory of parkland and current programs and services that occur in public parks in relation to the seven guiding principles. In addition, Parks, Forestry and Recreation is undertaking a broad and inclusive public and stakeholder consultation to inform the development of the plan, taking into consideration the guiding principles. Importantly, PF & R is taking steps to consult with many communities, including "at risk", underserved or hard-to-reach groups, such as those in low income areas, the homeless and newcomers. TPH will participate in the consultation as an internal stakeholder and will provide more detailed input that focuses on enhancing the health promoting aspects of the Parks Plan.

Toronto Public Health and the Board of Health are mandated through the Ontario Public Health Standards (2008) to promote health through the development of healthy public policies, programs and services. Toronto Public Health recognizes the importance of

parks and recreational amenities to the health of Torontonians and to the city as a whole and acknowledges the importance of the Parks Plan in our shared goal of improving health in Toronto.

Parks, Forestry and Recreation provides leadership and stewardship of Toronto's public parks, trails, and recreational facilities. Toronto Public Health has a long history of collaborating with Parks, Forestry and Recreation to promote health. Examples include: youth programming, injury prevention work, diabetes prevention projects, Peer Nutrition Program activities, community gardening programs, the development of Toronto's Shade Guidelines, the **Into**health partnership, and the Toronto Food Strategy.

In October 2011, the Board of Health approved the *Healthy Toronto by Design* report which described the Healthy City approach and its relevance to Toronto. The Board of Health endorsed recommendations for the Medical Officer of Health to work with the heads of relevant City divisions to identify and promote measures to protect and promote population health which are feasible within their mandate. This report represents an early initiative to apply that approach.

Toronto Public Health consulted with the Parks, Forestry & Recreation Division in the preparation of this report.

COMMENTS

Toronto Public Health's mission statement is to reduce health inequalities and to improve the health of the whole population. A key strategy to achieve the mission is to identify and measure health outcomes in the Toronto population, as well as contributing factors to health, to guide policy and program decisions. A critical part of addressing the mission is taking action to reduce health inequities, which are avoidable differences in health outcomes between different population groups as a result of adverse social conditions and inadequate public policy. TPH and other researchers have demonstrated that many health outcomes are unequally distributed in Toronto and that income is a key determinant of health outcomes^{1 2}.

The parks and trails system in Toronto, consisting of natural areas and tree coverage, as well as sports fields, playgrounds, outdoor pools, outdoor rinks, community gathering places, gardens and path systems, plays a key role in promoting the health of residents and the city as a whole. A quality parks system can also contribute to the reduction of health inequities.

The Importance of the Parks System in Promoting Health for All

Parks Reduce Risk Factors Associated with Chronic Diseases

The public parks system can play an important role in reducing many of the key risk factors for chronic disease: physical inactivity, exposure to poor air quality, and lack of access to healthy foods, shade and safe and inclusive communities.

Parks provide affordable places where people of all ages and backgrounds can be moderately or vigorously physically active. Trails and parks also help support active transportation activities such as walking and cycling. There are many studies linking access to local parks and greenways with increased physical activity and physical fitness^{3 4 5 6}.

The trees and vegetation in parks and along trails create shaded and cool settings that protect people from exposure to ultra-violet radiation and decrease the risk of skin cancer. The tree canopy in parks is an important source of shade and access to parks can mitigate the health impact of hot weather episodes. Vegetation in parks, especially trees, also improves air quality, which benefits respiratory health⁷.

Parks can provide opportunities to support community access to healthy local foods and can contribute to neighbourhood food security. Initiatives such as community gardens, good food markets, farmers' markets, and community outdoor ovens provide local residents access to fresh, affordable, healthy, and culturally appropriate foods.

Parks Promote Mental Health and Well-being

Parks provide contact with beautiful, calming, natural environments that provide residents with a place to relax and retreat from more intense surroundings. Access to open green spaces can produce measurable improvements to stress levels and to overall psychological health^{8 9}. A number of studies have found a variety of psychological benefits from people's experience in having parks located in close proximity to their home^{10 11 12 13}. These benefits include a place to escape, decreased negative mood, feelings of connectedness and reduced feelings of depression, among others^{14 15 16}.

Parks Promote Social Cohesion and Community Well-Being

Parks are hubs of the community and are essential aspects of the fabric of a healthy city. They provide a key gathering place where families and friends picnic; community groups hold events and celebrations; and people meet through a range of activities such as sports teams, community gardening or dog walking. Parks provide space to enable these activities to occur and thereby reduce social isolation. Strong social networks are associated with good health¹⁷.

Toronto residents have consistently identified parks and trails as valued resources¹⁸. Torontonians have demonstrated their commitment to assist in maintaining these assets through high levels of community participation. Parks are a catalyst for community building as evidenced by community parks groups such as High Park Community Advisory Council, Friends of Greenwood Park, Earlscourt Community Garden, and the

newly developed City wide organization, Park People: Toronto Alliance for Better Parks (<http://www.parkpeople.ca>). Such community involvement builds social cohesion and community capacity by bringing together people to share knowledge and skills to achieve common goals.

Parks Improve Environmental Health and Reduce Heat Vulnerability

The trees, turf, shrubs and other vegetation in Toronto's parks and trails improve air quality by removing pollution and substantially reducing the energy used to heat and cool buildings¹⁹. By facilitating active transportation, parks can also contribute to reducing air pollution from vehicles.

Parks' vegetation also provides shade and cools the air, mitigating the negative health impacts of climate change. Among the anticipated effects of climate change are increased intensity, duration and frequency of extreme heat events. TPH estimates that heat currently contributes to an average of 120 premature deaths per year in the City²⁰.

Some Communities have Greater Needs than Others

Chronic Diseases, Health Outcomes and Disparities

Chronic diseases, their risk factors and other health outcomes are not equally distributed across the Toronto population. For example, individuals with lower incomes have higher rates of hospitalization and death from heart disease than those with higher incomes^{21 22 23}. Income is also associated with rates of diabetes. Admission to hospital for diabetes is significantly higher in areas with the lowest incomes compared to areas with the highest incomes in Toronto²⁴. Toronto researchers have also shown that lower income neighbourhoods have the highest prevalence of diabetes and often have fewer health supporting services such as parks and recreation resources²⁵. Figure 1 shows that some areas located in the northwest and eastern parts of the city have both high diabetes prevalence and long travel times (by walking) to parks and schoolyards. Many of these areas also have higher rates of immigration, unemployment and lower levels of educational attainment.

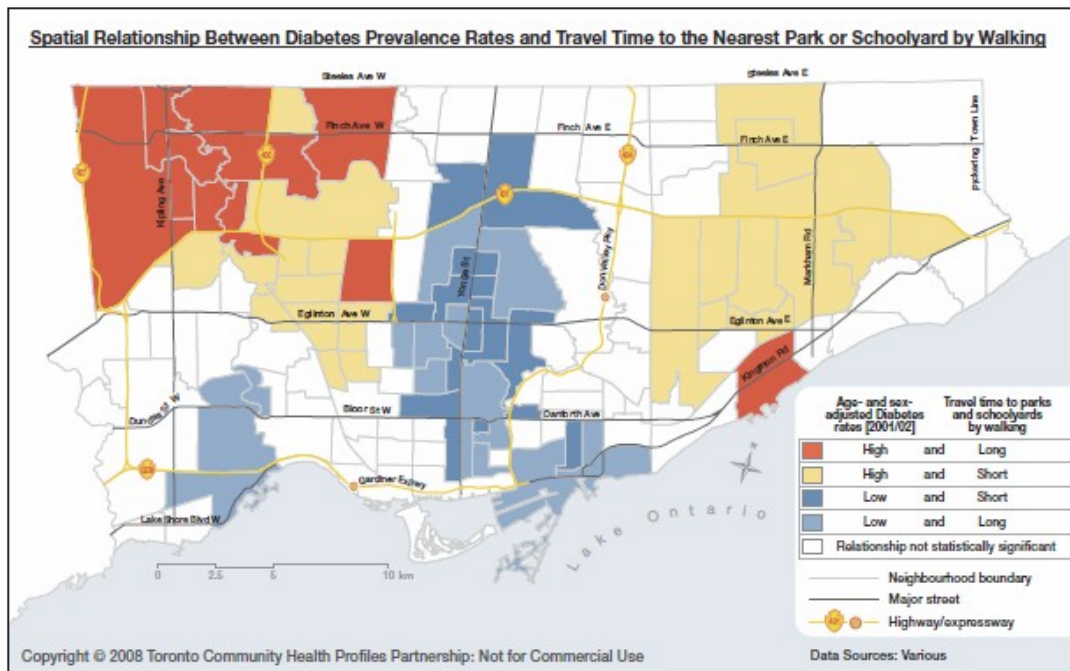


Figure 1. Diabetes prevalence rates and walking time to the nearest park or schoolyard, Toronto 2001/02. (Source: Toronto Community Health Profiles Partnership 2008. <http://www.torontohealthprofiles.ca>).

Physical inactivity and lack of access to healthy foods are also associated with the development of chronic diseases and differ by income and access to other resources that support health²⁶. Data shows that people with lower incomes in Toronto were less likely to be physically active than people with higher incomes²⁷. Individuals with lower incomes are also more likely to experience food insecurity than those with higher incomes²⁸. Areas in the city where access to affordable fresh and healthy food through supermarkets is limited (sometimes referred to as "food deserts"), are more prevalent in lower income neighbourhoods than in higher income neighbourhoods^{29 30}. Low income residents are also more affected by and vulnerable to heat and pollution than are higher income residents.

There are no reliable Toronto level data that map mental health by geography or by income, but provincial and national data as well as published research suggest that low income individuals experience more risk factors associated with poor mental health outcomes than those with higher incomes^{31 32 33}. They often cannot afford the basic necessities of life, including food and shelter. They often live in communities that are perceived to be unsafe or that have higher rates of crime, limiting their ability to freely and safely explore, interact with and enjoy their community³⁴. Contact with nature may contribute to a reduction in the burden associated with mental health^{35 36}.

Built Environment Research is Refining our Ability to Identify Areas of Need

As part of its ongoing focus on the built environment and its impact on health and health equity, Toronto Public Health is compiling data that highlights the relationship between built form, land use (including parks and green space) and community characteristics such as health outcomes and income status. PF&R mapping indicates that the density of parks varies across the city, but that most neighbourhoods are within 500 metres of a park³⁷. Very recently, TPH conducted research to identify specific areas of the city with both low park density and high concentrations of low income residents. The results are shown in Figure 2, which pinpoints specific areas to target for enhanced availability and quality of green space and park amenities. While green space is widely spread across Toronto, the TPH map shows the existence of neighbourhoods which have high prevalence of low income and which are not within easy walking distance to parks. This and other mapping information will be shared with PF&R so that implementation of the Parks Plan will help the City better address health inequities that exist at a community level.

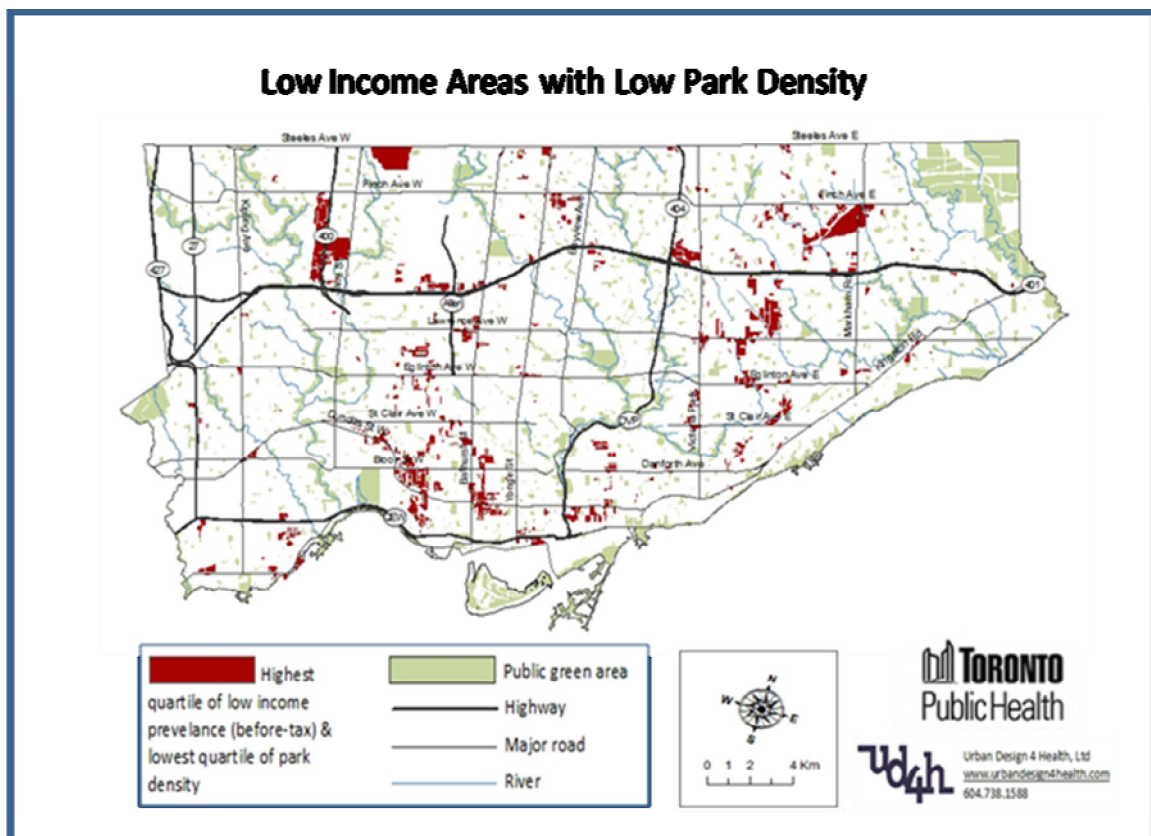


Figure 2. Low income by postal code dissemination area (2005, before tax) and low park density by 1km buffered postal code. Prepared by Urban Design 4 Health, 11/01/2011.

TPH recently reported on heat vulnerability mapping (Figure 3) and a survey which indicate that low income groups and renters in older high-rise apartment buildings (many of which are located in poorer "inner suburbs") are less likely to have in-home cooling

and experience more difficulty accessing cool places³⁸. This information, previously shared with PF&R, will also be useful to assist in understanding where park amenities and upgrades might better serve a role in heat mitigation for those most vulnerable.

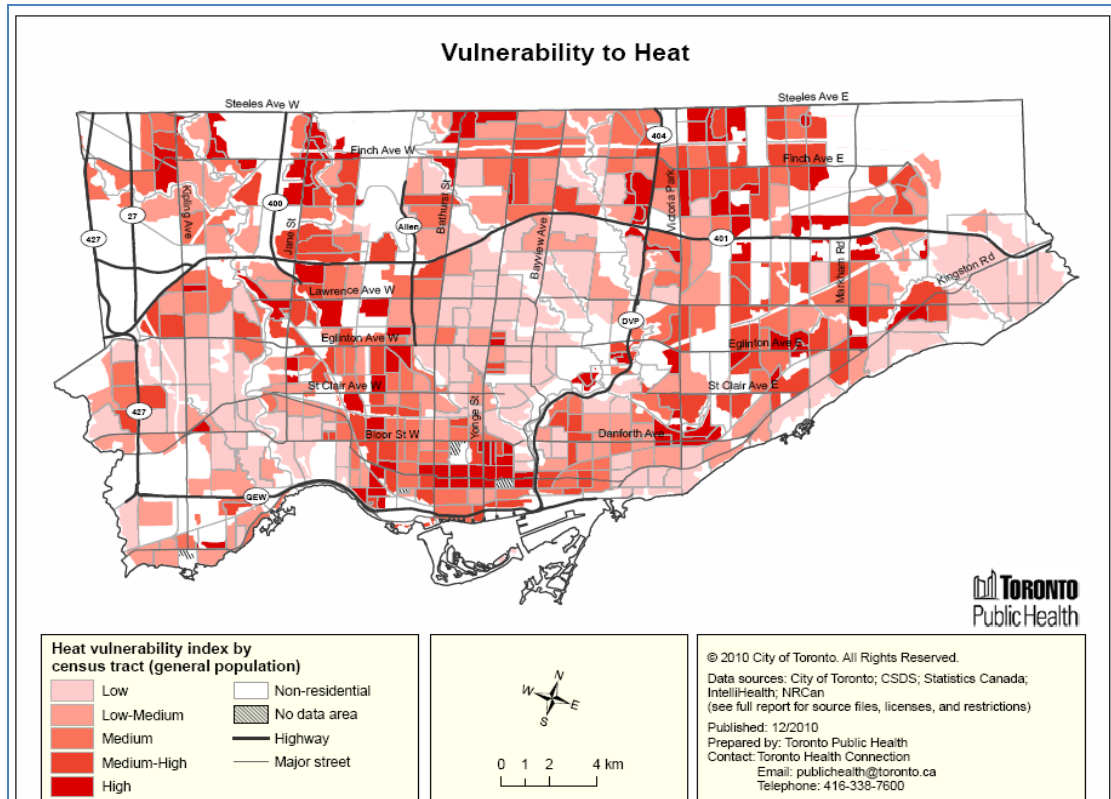


Figure 3. Vulnerability to Heat in Toronto

Reducing Health Inequities through the Parks Plan

Equitable access for all residents to parks and publically accessible open spaces is a key guiding principle of the Parks Plan. As a valuable city resource, PF&R notes that the system of parks and trails must be accessible to residents in all parts of the City, and must respond to the range of needs of Toronto's diverse population regardless of age, level of ability, income or cultural background³⁹.

Access to safe and high quality parks that are close to where people live and work is particularly important for low income residents to improve their health. Access to parks is influenced by the social and health circumstances of the individual or family. Low income families are less likely to be able to afford to travel (via car or transit) to more distant and often larger parks. Larger parks are more likely to have sports fields, play structures and other amenities that provide opportunities for activity. Seniors, older adults and families with young children may be less mobile and limited in the distance they can reasonably walk to parks. Local neighbourhood parks with appropriate amenities can provide affordable, accessible places for health enhancing activity and refuge from

the urban environment, particularly for residents of limited means, mobility and greatest need.

In addition to income, other factors, such as race, education, immigration status and gender create differences in opportunities to achieve good health. Members of racialized communities in Canada have 50% lower physical activity rates⁴⁰. Low-income, new immigrant families with children living in dense high-rise neighbourhoods characterized by community safety issues face multiple barriers to being physically active in their local neighbourhood⁴¹. Research in the United States indicates that racialized communities have different outdoor recreation use patterns and preferences for activities in parks⁴². The Parks Plans and other municipal public policies provide important opportunities to modify the factors that contribute to health inequities. Encouraging park design that maximizes public safety and supports active living, particularly in high density low income neighbourhoods with a diversity of ethnoracial communities is an important consideration.

There are many important objectives that support health among the current seven guiding principles outlined by PF&R in the development of the Parks Plan. Although health is not explicitly articulated in these guiding principles, some of the objectives listed could be strengthened to ensure that health is an integral component of the Plan and that it also further contributes to reducing health inequalities. For example, "recognizing the system of parks and trails as an essential feature of the built environment to enhance the health of Toronto residents and of the City as a whole" could be added to the objectives for the "City Infrastructure" guiding principle. Similarly, acknowledging that parks can provide and allow for community food activities could be a health-specific objective under the "Equitable Access" guiding principle. Likewise, objectives related to further enhancing child and youth development could be integrated into the "Nature in the City" guiding principle by identifying opportunities for hands-on learning about the natural environment.

The principle "Supporting a Diversity of Uses", acknowledges the importance of parks and open spaces for enabling social connections, community cohesion and active living for multiple generations and diverse cultures. Actively engaging with community partners in areas of the city where there is greatest need based on rates of low income, ethnoracial diversity and poor health indicators may help reveal the different ways in which diverse groups utilize parks in Toronto. Such information could inform park development and, with support for identified activities and amenities, encourage greater usage by a wider range of Torontonians.

Toronto Public Health recommends that the Parks Plan provide opportunities that will support residents and communities with the greatest health needs and associated risk factors and economic barriers for poor health and who may have the least access to high quality, safe parks. The Parks Plan, in determining priorities for the future, can contribute to the health of these residents and communities through such investments. Toronto Public Health is committed to working with PF&R to identify areas of greatest need and

work with community partners and residents to address concerns and needs that may be upstream contributors to health inequities.

Four strategies that could contribute to reducing health inequities are:

- *Alongside the "three lenses" approach set out in the 2001 Parks Acquisition Strategic Directions Report, pursue opportunities to acquire park space within reasonable walking distance of neighbourhoods with higher concentrations of low income residents.*
- *Plan development and upgrades in existing parks to ensure amenities are available to communities where there is greatest need based on rates of low income and other relevant health indicators. The "at risk" neighbourhoods mentioned in these first two strategies could be identified using health status data, sociodemographic data and data from the built environment mapping work under development by TPH.*
- *Plan the incremental provision of shade through tree planting and shade structures in existing parks located in areas with high concentrations of residents vulnerable to the health effects from extreme heat. P, F & R staff co-lead the Corporate Shade Policy with TPH and are implementing and implementing it through their Shade Policy Guidelines, park design initiatives and Urban Forestry tree planting activities. Considering improvements to trees and other vegetation and shade structures (as outlined in the Toronto Shade Guidelines) could also be guided by the health inequity mapping work underway by TPH.*
- *Plan enhancements in parks located in low income neighbourhoods that support local food infrastructure and greater access to affordable and nutritious food. Toronto Public Health suggests that PF&R consider strengthening this focus by exploring ways to provide or allow urban agriculture opportunities, such as food markets, gardening, outdoor ovens, etc., in areas of the city that have the greatest concentration of low income residents at risk of poor health outcomes.*

TPH will provide data regarding health outcomes and related health risk factors, as well as mapping of data (such as heat vulnerability or incidence of chronic diseases) to Parks, Forestry and Recreation division. This information will assist in determining priorities and targeting investments for parks acquisition, improvements and programming across the city so that the Parks Plan supports improved health outcomes for those with higher rates of chronic diseases and other health risk factors. TPH will also participate in the formal consultation process and expand on the proposed health considerations outlined in this report.

CONCLUSION

The Parks Plan provides an opportunity to be intentional, strategic and explicit about Toronto parks as anchors of healthy, vibrant communities. Toronto's parks and trails provide a key resource to support the prevention of chronic disease and the maintenance of a healthy environment and strong neighbourhoods and communities. Given that research predicts health inequities in Toronto may increase in the future,^{43 44} Toronto Public Health sees the Parks Plan as contributing to reducing health inequities through this vital municipal resource. TPH will work with PF&R to enhance the integration of health into the development of the Parks Plan, and continue to act as partner to assist in its implementation. In particular, TPH commits to sharing data and tools that will help achieve shared goals for enhanced health in Toronto.

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