GREENSPACE

INDICATOR TYPE: **Environmental**

DOMAIN: **Living**

This indicator is important for local residents because it provides an idea of how "green", literally, their city is. Although definitions of greenspace can vary widely by jurisdiction, it is generally assumed to include natural areas, various types of parks, ravines, environmental protection zones, and environmentally sensitive areas.

Official Plan (OP) designated greenspace per capita is a useful indicator because it represents a commitment by local government to preserve greenspace and shows the availability of greenspace relative to the number of people living in the area.

TRENDS

We have only obtained information on this indicator for one year, 1999. Therefore, we offer no trend analysis but will use this indicator as a baseline for tracking future changes in greenspace per capita. The results show that in 1999, greenspace per capita was considerably lower in Toronto than in the other GTA regions. At the same time, the percentage of land in Toronto that is designated as greenspace is about the same as that in the other regions, with the exception of Durham, which has a much higher percentage of designated greenspace. The large population of Toronto relative to the other regions gives Toronto a much lower amount of greenspace per capita..

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Table 1. Greater Toronto Area Designated Greenspace

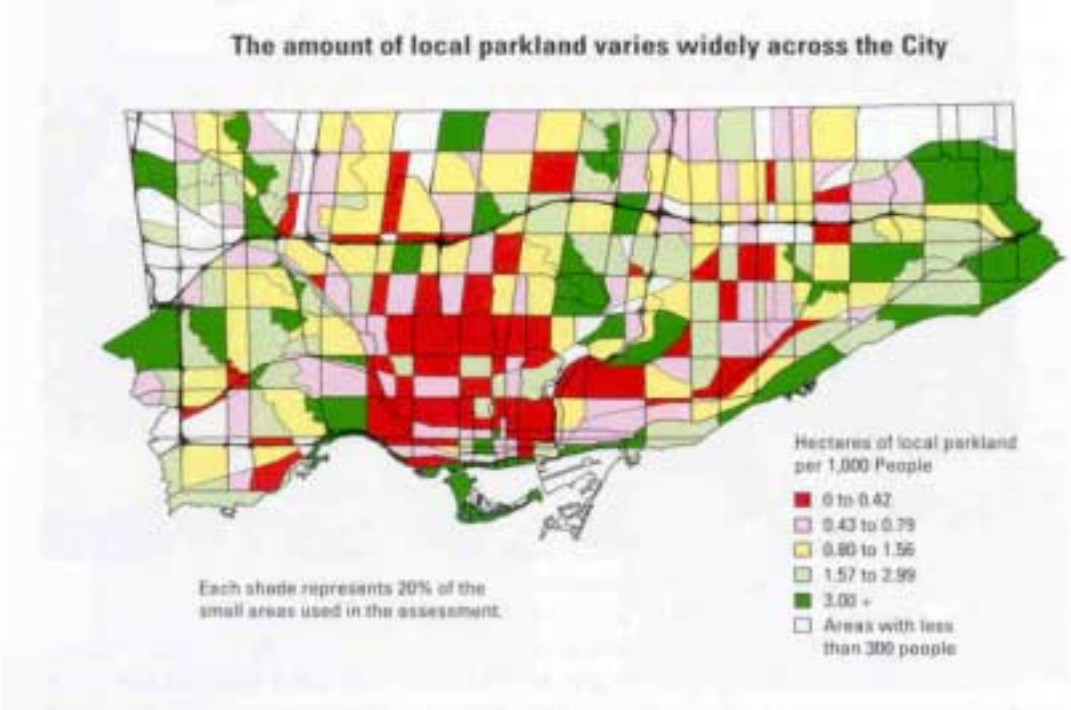
Regional Municipality	Regional Area (sq km)	Greenspace Designation in Official Plan (sq km)	Percent of Region	Population (1999)	Greenspace per capita (ha)
Toronto	632	138	21%	2.2 million	0.06
Peel	1,252	237	18%	933,000	0.25
Halton	971	196	20%	363,703	0.54
York	1,773	467	26%	712,746	0.66
Durham	2,533	1,029	40%	500,000	2.06

Source: Wright (2000)

Although this indicator is effective for describing differences in availability of greenspace across the GTA regions, there can be considerable variation in access within the regions.

One way of tracking this is to measure proximity to greenspace at a fine level of detail. Although we were unable to find such data, we did find data describing proximity to one type of greenspace, namely parkland, in the City of Toronto. The map of this indicator shows how widely access can vary within a region (see Figure 1). Toronto is approximately 12% municipal and conservation parkland (Dill and Bedford 2000). Approximately three quarters of its parklands are ravines, valley lands, woodlots and natural waterfront areas.

Figure 1



Source: Dill and Bedford (2000)

Parks[1] or park-like land, occupies a large percentage of a city's designated greenspace. Parks are a good indicator of urban sustainability and quality of the urban environment, because they perform important ecological and social functions (ETF 2000, 19). They also play an important role in encouraging reflection and recreation in the outdoors (Beatley and Manning: 1994). However, since parks are typically for leisure, sports, and other social activities, many do not represent ecologically significant greenspaces. Parkland seems to fit better as an indicator of people-environment interaction, rather than a pure natural environment indicator (Hough 1995)

Proximity to parkland tells us about the green potential of Toronto, and hints at the quality of life in the Toronto urban environment. How connected people feel to parkland

[1] For summaries of the features of Toronto's main parks, see Toronto Tourism: http://toronto.com/Toronto/Tourism_Toronto/Media_Gallery/News_Releases/Parks_and_Gardens/

or greenspace can affect their motivations with regards to local environmental issues and problems. Proximity to greenspace is also an important indicator as to how many people will benefit from local environmental initiatives currently underway in the green spaces of Toronto, such as park re-naturalization efforts, reduction of pesticide applications on city-owned properties, and tree planting programmes (Dill and Bedford 2000).

LINKAGES

Greenspace in a city contributes to carbon fixing/air purification occurring naturally at the local level. This indicator also identifies the space available for human-environment interaction in the form of leisure activities such as sports and nature walks. It is also linked to habitat availability for urban wildlife. Finally, it also speaks to how much land in the city is left undeveloped or relatively undeveloped and in a natural state, with more natural structures such as root systems, loose soil and so on.

ACTION

Indicators such as greenspace per capita and proximity to public open greenspace are vital tools for the assessment of local greenspace. Using and reflecting on the values of Toronto's green indicators reveals a glimpse of where the city stands, and which areas of greening it should focus on. Using the results of these indicators to demand minimum standards for designated greenspace, as well as other things such as funding and committees directed at greenspace issues, is the second step to putting local knowledge into action to keep the city green. A challenge in the years to come will be to maintain and/or improve availability of and access to greenspace, especially naturalized areas, without compromising goals to cultivate a more compact urban form, and to reduce the rate of sprawl.

Cities can undertake a wide variety of activities to preserve and/or improve their greenlands. Many city-sponsored, private and NGO organized efforts are currently underway to "keep Toronto green". Organizations such as Save the Oak Ridges Moraine (STORM) and the Save The Rouge group, as well as branches of the City, such as the Environmental Task Force (ETF), have all recognized and begun to work on greenspace issues. Examples of what is currently being done include park re-naturalization efforts, and tree planting and maintenance. Below are more ideas of what can be done to make a community greener:

- Facilitate environmental education regarding the need for urban greenspace and how people can contribute to greening the community; through workshops, trips into local schools, public forums, etc.

- Give more support, especially funding whenever possible, and greater public recognition, to creative initiatives already underway, such as the Toronto Green Roof Demonstration project, to keep the public informed and involved in creative re-greening of the city (www.cityfarmer.org/GreenRoof.html).

- Make more of an effort to integrate greenspace components of city projects, proposals and reports, to the city's environmental problems, such as poor air quality, and flooding. Help the public to better understand why greenspace is not a stand-alone environmental issue.

- Lend support to other jurisdictions that wish to have stringent greenspace designations in their Official Plans, and take a stance against attempts to overrule or change such designations for new development purposes.

- Investigate green bonuses for taxpaying individuals, private companies and institutions that make a significant contribution to greening a community.

- Modify existing parks policies to strive for "greener greenspaces". For example, set a naturalization quota for all parks or a minimum percentage of indigenous species for public lands.

DIFFICULTIES

One challenge in using greenspace as an indicator, is the question of how the greenspace was designated. Combining the greenspace in and around Toronto, as designated in different regional Official Plans is difficult, because each Official Plan uses different basic categories for determining what to consider as greenspace[2]. For example, Peel and Halton have completely different descriptions and labels for each of their five greenspace categories. Another problem is that officially designated greenspace does not include private lots with green space, including school fields, or corporate gardens, for instance. It also leaves out areas of forests, wetlands, beaches, bluffs and ravines, which are not officially parkland (ETF 2000).

A final shortcoming of designated greenspace as an environmental indicator, is that "identification of designation of land does not necessarily mean guaranteed implementation or preservation" (Wright 2000). The Official Plan simply sets the guidelines for development within an area, but does not guarantee that all of its guidelines or recommendations will be upheld. For instance, should the Ontario Municipal Board overrule any locally made decision with regards to greenspace, the numbers could change. Therefore, greenspace designation found within an Official Plan, is only an estimate or suggestion of the amount of greenspace found in the area.

Proximity to parkland as an indicator provides little understanding of Toronto's greenspace in a qualitative sense. It does not describe the type or quality of greenspace in the city.

[2]The differences in greenland designation between the Kanter report and the regional O.P.s or Durham, York, Metro Toronto, Peel and Halton, illustrated in The Evolving Physical Condition of the Greater Toronto Area: Space, Form and Change, indicate the problematic nature of greenland designation as an indicator. For example, the Kanter report found 525 sq. km of greenspace in Durham, representing 20% of the region, while the Durham O.P. Listed 1,029 sq. Km of greenspace, representing 40% of the region "(Wright 2000)

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