



Sustainable Cities

The Role for Philanthropy in Promoting Urban Sustainability



Ray Tomalty, Ph.D.
Smart Cities Research Services

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Foreword

The Canadian Environmental Grantmakers' Network (CEGN) is a membership group of 60 funders for sustainability – private, community, public and corporate foundations, and government and corporate funding programs – from Canada and the United States. Our mission is to strengthen the impact of philanthropy in support of an environmentally sound and sustainable future for Canadians. We do this by facilitating collaboration and by generating and sharing knowledge. We also give public voice to the shared aspirations of our members and provide skill-building opportunities designed to help ensure that our members keep pace with a rapidly changing world. And we work with key partners and not-for-profit organizations that provide an essential function to Canadian communities through public engagement and policy development and implementation.

When CEGN was formally incorporated in 2001, the majority of our members focused their funding on the conservation of Canada's wilderness and wildlife. While that focus is still a strong and important one, many of our members have begun to turn their attention to Canada's urban environments. Our cities present a wide range of environmental concerns, as well as opportunities, and funders are scoping out the role they can play and assessing the particular contribution that philanthropy can make. This brief is intended to contribute to the evolving understanding of the role for philanthropy in promoting urban sustainability and to strengthen the ways by which funders can work with others to fulfill a shared vision of healthy and sustainable urban environments.

Dr. Ray Tomalty was commissioned by CEGN to scout out the role for philanthropy across a broad range of urban sustainability issues. This was no small task and Ray's work involved numerous interviews with funders both in Canada and the United States, as well as practitioners and other leaders in the field of urban sustainability. We are grateful for his fine work and his diligence in developing this overview and providing his observations on the role for philanthropy.



Mark Gifford
Chair, CEGN
mark.gifford@vancouverfoundation.ca
604-688-2204



Pegi Dover
Executive Director, CEGN
pegi_dover@cegn.org
647-288-8891





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Executive Summary

Commissioned by the Canadian Environmental Grantmakers' Network (CEGN), this report outlines some of the key issues related to urban sustainability in Canada, profiles some of the promising approaches, and explores various roles that the philanthropic community could play in moving communities forward in this field.

Sustainable cities are viewed as those that meet our human need for healthy and diverse habitats while preserving non-renewable resources for future generations and staying within the limits of local, regional and global ecosystems. Increasingly, our notions of sustainability are influenced by complementary approaches to economic and social issues. Sustainable cities also focus on wellbeing and livability as measures of success within a “generative economy” rather than simply using economic growth as a yardstick for progress. Finally, a city that is able to draw on a rich mosaic of cultures, perspectives, and skills should, like a biological organism, be more resourceful, more innovative and more resilient.

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At the outset, it is important to recognize that direct philanthropic support for charities makes up a tiny percentage of the financial resources available for this work; earned revenues and government grants make up the lion's share of most community organization's budgets. Government and private investments in the built environment dwarf all other financial sources that could be aligned with sustainability principles. However, foundations can tackle issues and support innovative approaches in a way that governments and the private sector cannot or will not.

This report is intended as a starting point for a broader discussion about strategic philanthropy in support of more sustainable cities. Some of the roles that foundations might consider are as follows:

- Frame “sustainability” in a holistic way, emphasizing the link among environmental, economic, and social characteristics;
- Design strategies, including granting parameters, that place a premium on collaboration within the environmental movement, with other sectors and across domains (health, education, recreation, economic, etc.)
- Use their brokering skills to convene and nurture partnerships among municipal governments, community organizations, and the private sector;
- Provide support for promising and innovative initiatives that, if successful, can then be scaled up and financed by the public or private sector;



- Strengthen the individual and collective capacity of community organizations to innovate, to work constructively with difference and conflict, and to deliver results;
- Collaborate with other foundations: co-creating initiatives, sharing lessons, and supporting the creation of a new narrative;
- Establish impact investing policies for their endowments and create pools of capital for green technologies and sustainable real estate development with an emphasis on social impact.

Challenges for philanthropic funders in the field of urban sustainability

There are considerable challenges for philanthropic funders seeking to work and have impact in the field of urban sustainability. These include:

- The path to urban sustainability is very complicated and difficult to understand fully. In some communities, nonprofits and academics are playing a critical role in identifying the levers of change and strategizing the way forward with other key stakeholders. Funders can support this work but this careful and strategic thinking needs to come from within the community.
- The amount of philanthropic money available is small compared to the size of the problems being addressed. Developing innovative ways to leverage philanthropic support to garner additional resources from governments and the private sector is both a challenge and an opportunity for the nonprofit community.
- The urban sustainability sector is characterized by a large number of small groups undertaking hyper localized projects. While such projects are worthwhile in themselves, they are not “game changers” unless they can be scaled up. This will require consistent funder support over the long-term and even collaboration among funders in order to maximize the impact of limited philanthropic resources. Funder support for capacity building within nonprofits, as well as support for networking among nonprofits to help ensure a greater common purpose would also be useful.
- Funders involved in urban sustainability issues often have to face the question of how best to work with municipal governments. Identifying the best form of cooperation can be tricky. The challenge for funders is to identify initiatives that municipalities do not have the resources to initiate on their own but could carry through with and scale up once they are of proven value.



- There is a lack of vehicles for facilitating learning among funders interested or involved in this sector. Funders collaborate in informal ways, but in practice, there is little cross-fertilization in terms of which funding strategies are working or not working, identification of promising groups suitable for funding, and so on.
- Urban sustainability is an emerging field that is characterized by the need for deep systemic change. Transformative changes are being hampered by the existing policy framework but could be facilitated by supportive policy changes. Making policy change at any government level requires a realistic assessment of political forces, investment in research, convening the relevant stakeholders, building long term relationships with agents of change within governments, and long-term commitment to non-profit allies and carriers of key messages.

Addressing the challenges

- **Advance policy:** There are many good examples of funder involvement in policy development related to urban sustainability in Canada, but one of the most successful has been the joint funder-NGO effort to set up the Ontario Greenbelt. Several Canadian foundations – principally the Metcalf and Ivey Foundations but also the Neptis, McLean, and Salamander Foundations – collaborated with NGOs such as Environmental Defence and the Greenbelt Alliance over a one year period leading up to the province’s decision to create the Greenbelt. Sustainable Prosperity is an example of another innovative policy initiative. The organization, which is described as a national ‘think and do tank’ and is advancing the adoption of policies in support of a greener and more competitive Canadian economy, had its genesis in a funder discussion at a CEGN meeting. Following the meeting, a number of those funders, including the McConnell Foundation, responded to a proposal that laid the groundwork for the organization.
- **Leverage funding:** The BC Real Estate Foundation provides a good example of how funder intervention can harness forces for change and leverage modest philanthropic investments with the immense resources of the building industry to produce important changes in the way planning and development is done. The Foundation funded the BC Design Centre for Sustainability over a six-year period (2005-2011) in order to launch an innovative planning and urban design process that resulted in a sustainable new neighbourhood in Surrey (BC) called East Clayton.
- **Work with grantees to define strategy:** One of the most innovative examples of this approach is the ClimateSpark Social Venture Challenge (SVC), a partnership among the Toronto Atmospheric Fund (TAF), To-



ronto's Centre for Social Innovation, the Toronto Community Foundation (TCF), and others. The objective of the initiative was to engage new audiences and stimulate "game-changing" social ventures that could offer a significant greenhouse gas emissions reduction benefit through scaled-up delivery of their product or service.

- **Conduct research to shape new grantmaking programs:** A good example is the current effort in Quebec by a consortium of funders to work together with other stakeholders to develop a program to address the so-called "nature deficit syndrome", i.e., to better connect young urbanites to nature. The Claudine and Stephen Bronfman Foundation, David Suzuki Foundation and the Fondation de la faune du Québec pooled their resources to fund a study that would enhance understanding of the problem and produce ideas on how the funders could help address it.
- **Stimulate creative thinking and organizational development:** Social Innovation Generation (SiG) was launched by the McConnell Foundation in collaboration with the University of Waterloo, the MaRS Discovery District, and the PLAN Institute with a mission to catalyze social innovation. It has included training opportunities for community organizations, building the case for impact investing, and applied research and tools in developing effective collaborations.
- **Develop indicators of success:** A national program of indicators would allow grantmakers to assess local progress using a standard set of metrics. The Vital Signs Program of Community Foundations of Canada is an important step in this direction in terms of charting progress within a particular community and is currently in use in 34 communities across the country. In the US, the Star Community Index is now being rolled out by ICLEI-Local Government for Sustainability. The 81 goals and 10 guiding principles collectively define community-scale sustainability.
- **Convene stakeholders:** A good example of a Canadian foundation initiating a major convening effort in issues related to urban sustainability is the Metcalf Foundation's Sustain Ontario initiative. Sustain Ontario is a province-wide, cross-sectoral alliance that promotes healthy food and local sustainable agriculture.
- **Build the knowledge base:** An excellent example of a foundation that has contributed greatly to our understanding of urban sustainability issues is the Neptis Foundation in Toronto. Neptis commissions or directly undertakes studies that will shed light on the structure and growth of urban regions, especially the Greater Golden Horseshoe area and in particular, its built environments and landscapes.

- **Invest assets:** There is increasing interest in “impact investment”, or using a foundation’s assets to meet not only the financial stability of the organization, but also its environmental and social mission. There are a number of emerging possibilities. Vancouver City Savings Credit Union (Vancity) is an excellent example of good practice in this regard. Its Resilient Capital Fund attracts impact investments from other lenders and foundations (such as the Vancouver Foundation) and uses the capital to make low-interest, high-risk loans to help social enterprises get off the ground or scale up their activities.
- **Help municipalities innovate:** The Greenest City Fund in Vancouver is a good example of collaboration between a funder and a municipality. This fund was set up by the City of Vancouver and the Vancouver Foundation, with each partner putting up \$1 million. The purpose of the Fund is to invest in innovative community-based strategies to engage people around the City’s 10 Greenest City Goals.
- **Collaborate with other funders:** There are several good examples of funder collaboration in this field in the US. On a regional level, the Puget Sound Funders Partnership for Sustainable Communities is a funders’ collaborative focused on transit-oriented development in the metropolitan region of Seattle. The Partnership has 15 member organizations including corporate, family and community foundations. At the national level, the Funders’ Network for Smart Growth and Livable Communities, created in 1999, has 145 member organizations (143 US and two Canadian).
- **Create a national organization to promote urban sustainability:** At present there is no single organization operating at the national level with a broad mandate to promote urban sustainability in Canada. There is some interest among funders, academics and NGOs for some kind of national organization that would raise awareness of urban sustainability issues, undertake research, do advocacy among federal and provincial governments, and set out an ambitious agenda for moving cities in a more sustainable direction.
- **Create a network of cities to promote urban sustainability:** Foundations committed to urban sustainability could take a leading role in setting up a network of people in cities committed to urban sustainability in order to facilitate knowledge transfer, communication, joint projects, and so on. The Urban Sustainability Directors Network in the US, which networks 111 municipal sustainability directors in the US and Canada provides a possible model in this context. The ten sustainability directors in Canada who belong to the USDN could form the nucleus of a wider network of senior municipal managers involved in sustainability work.





Introduction

From an environmental point of view, cities have always been suspect: largely devoid of nature, teeming with people and their all-too-human problems, cities have appeared to many as “black holes” in nature. In cities, our separateness from nature – both physical and existential – could not be more obvious. Nature, many people once thought, was where you went in order to get away from cities. It followed that environmental grantmaking strategies were primarily focused on resource use, wilderness preservation, and other non-urban issues.

Over the last couple of decades, our view of cities and their role in environmental well-being has gradually shifted to a more integrated one. Cities, it is increasingly understood, are where most of the environmental problems of the world originate, and it is in cities where they must be resolved. As Maurice Strong has said, “the future health of our planet will be determined in our cities”.

As this shift in perspective has taken place in society, grantmakers have increasingly become aware of the need to address urban issues in their granting programs and other activities. Understandably, grantmakers are wary of entering or expanding their activities in this field without a deeper understanding of its dynamics, opportunities, and entry points.

This report was commissioned by the Canadian Environmental Grantmakers’ Network (CEGN) in order to explore the possibilities for greater philanthropic involvement in the issue of urban sustainability in Canada. The brief outlines the key issues that are presently of greatest concern related to urban sustainability in Canada, profiles some of the positive examples of current philanthropic support (both within and outside of Canada) that are ad-

At the heart of most definitions of urban sustainability is the notion that a city is sustainable only if it meets the social and economic needs of its residents without undermining its ecological continuity over time.

addressing urban sustainability issues, and explores various roles that the philanthropic community could play in moving communities forward in this field.

The report was prepared through a series of 34 interviews with leaders in the field of urban sustainability; including academics, grantmakers, activists, professionals involved in the real estate development industry, and municipal leaders (a list appears at the end of this paper). The interviewees, drawn from cities across the country and in some cases from the U.S., were asked to identify the key issues related to urban sustainability in Canada today, and what role the philanthropic community could or should play to support the transition to urban sustainability. From these interviews emerged key themes that form the basis of the following brief.

This brief focuses on larger and medium size cities in Canada. Smaller communities and rural areas may share some common concerns and opportunities as medium and larger cities in Canada and, therefore, this brief may be of some interest to grantmakers operating in those “markets”. That said, it is clear that larger communities have concerns not shared by smaller ones and vice versa. For example, larger communities tend to experience much higher growth rates and experience problems related to managing that growth, such as urban sprawl, settling immigrant populations, and housing affordability. Large cities are also more likely to have problems related to air and water pollution, managing solid waste, and the lack of greenspace. These issues may be less important in smaller or rural communities, where key issues may relate to economic diversification, population decline, and youth unemployment.

What is urban sustainability?

As is frequently noted in the literature on this topic, there is no universally accepted definition of urban sustainability. Sustainability has been defined in many different ways, but at the heart of most definitions is the notion that a city is sustainable only if it meets the social and economic needs of its residents without undermining its ecological continuity over time. Meeting social and economic needs entails ensuring that economic opportunities are fairly distributed among the population, that all citizens have an adequate standard of living (e.g., in terms of education, housing, healthcare, and food), and that everyone has access to opportunities for participation in community and political life. Ecological continuity means that urban development does not overwhelm the capacity of local and global ecosystems to absorb waste and contaminants, deplete the store of resources that cities depend on, or undermine local, regional or global ecological processes.



The importance of cities in Canada

Despite the close identification of Canada with vast tracts of wilderness, rural areas and resource extraction, our country is now one of the most urbanized places in the world. Although urban areas cover only 0.2 percent of the country's land base, roughly 80 percent of Canadians are urbanites (i.e., they live in settlements with populations over 10,000) – with almost two-thirds of the country's population living in metropolitan areas with more than 100,000 residents. Moreover, over half of the population now lives in four large conurbations¹: Ontario's Golden Horseshoe, Greater Montreal, British Columbia's Lower Mainland and southern Vancouver Island, and the Calgary-Edmonton corridor. While the population living in rural areas has declined in Canada, urban areas continue to flourish. This in itself is helping to shift attention to cities as an important locus of public policy.

Cities are also important from an environmental point of view. Although they are traditionally thought of as grimy and polluted, cities actually present the most environmentally benign way to organize large numbers of people. Cities have lower per capita levels of resource use, waste production, water use, energy use and greenhouse gas emissions compared to a population that is spread out in rural landscapes. Cities also allow for more efficient municipal services, including waste removal, recycling and public transit. This feature of cities has become increasingly salient as concerns over debt and public finances have mounted in Canada.

The concentration of people in cities also means that this is the locus of many environmental problems in Canada. Cities are centres of consumption and production, accounting for most of the energy used in Canada, the greenhouse gases generated, pollutants released into water and air, and waste materials generated. They are also largely denuded of natural features such as forests and wetlands and efforts need to be undertaken to preserve, enhance and link residual natural features into healthier systems. The ecological impact of cities (through emissions, consumption and other human activities) extends far beyond their local boundaries to include significant impacts on the surrounding rural, regional and global ecosystems.

There is also a growing realization that cities – centres of finance, production, services and innovation – are of central importance to economic growth and international competitiveness. The concentration of industry, business and service sectors and labour in cities has made them the key drivers of the national economy. Two-thirds of Canada's employment and real economic output are located in metropolitan areas. Cities are also the focus of international competition in the global economy. Urban environmental quality is

¹ A conurbation is an extended urban area usually made up of several towns and cities that are losing their separate definition.

Cities are also where the widening inequalities in Canadian society are most clearly seen.

one of the factors increasingly associated with the ability of countries to attract footloose global investment and knowledge workers. Moreover, as centres of creativity and social innovation, cities can contribute solutions to environmental problems.

Cities, of course, are also crucial to immigrant settlement as they are destinations of choice for the vast majority of immigrants who settle in Canada. Canada's metropolitan areas are home to over 90% of the immigrants who come to this country. About three-quarters of Canada's new immigrants settle in Toronto, Vancouver or Montreal. Immigrants have a particularly significant presence in larger centres such as Toronto and Vancouver, where new immigrants make up 44% and 38% respectively of the populations. There is also a slow, but steady growth of Aboriginal people residing in Canada's cities: about half of Canada's Aboriginal people live in urban areas. Thus, the integration of newest and oldest Canadians into our economy and culture is taking place in the country's urban regions. How our cities perform in this respect will have a major impact on our economic performance and social stability in the years to come.

Cities are also where the widening inequalities in Canadian society are most clearly seen. Growing disparities in income are being reflected in the patterns of residential location, with the well to do increasingly concentrated in neighbourhoods with high property values, the most attractive built environments, and good access to services and amenities. Less well-off Canadians are increasingly relegated to neighbourhoods with poor access to nutritious food, inadequate transit services, a lack of suitable employment opportunities, and concentrated social problems. Geographical segregation by class is straining the social fabric as it undermines a shared sense of destiny, tolerance for difference, and support for the public services needed to ensure an adequate quality of life for all.

Urban governance

Urban sustainability is not the responsibility of any one level of government, discipline or social actor. Provincial, federal and municipal governments are all involved to one extent or another and a variety of other social actors play important roles.

Although we typically associate urban issues with the municipal level of government, in fact, provincial and territorial governments in Canada play a strategic role in urban sustainability. These governments have constitutional responsibility for municipalities, including the authority to change municipal boundaries, create or abolish municipalities, and establish super-municipal structures (such as regional land use, smart growth, transportation or waste management authorities). Provinces are also responsible for setting out the powers and responsibilities of municipalities through legislative instruments such as Municipal and Planning Acts.



Provinces set standards that municipalities must implement, including some that address environmental issues such as water treatment, waste management, and building codes. Direct provincial spending on highways, transit, sewer and water, and social infrastructure (schools, hospitals, etc.) has impacts on the pattern of growth and the environmental performance of urban areas. Finally, provincial spending on social programs has a major impact on the social sustainability of cities, including the distribution of wealth, access to services, and the integration of immigrants.

The federal government has no constitutional responsibility for municipalities per se, but nonetheless has a significant impact on urban sustainability, especially through its spending programs. The federal government supports urban infrastructure through programs such as the Green Municipal Investment Fund, the Green Municipal Enabling Funds, and Infrastructure Canada programs. The federal government also has a big impact on social sustainability through its role in wealth redistribution, including employment insurance, old age security, its transfers to the provinces for social, health and education programs, and its provincial equalization grants.

The federal government also has legal jurisdiction in certain areas relevant to urban sustainability issues, including setting fuel and emissions standards for motor vehicles, national air and water quality objectives, protecting fish habitat, and the regulation of key transportation systems (ports, trains, airports). The federal government is also the largest landowner in many cities. Some very large federally-owned land parcels (such as former military bases or post offices) have come up for redevelopment, presenting the opportunity for federal leadership on urban sustainability. Finally, Ottawa is responsible for international environmental and trade agreements, many of which have implications for cities (e.g., the Kyoto Protocol).

Municipal governments are most directly identified with urban sustainability, especially the environmental aspects. Municipal governments influence the rate of urban growth and physical spread of the city through their official plans and zoning bylaws. They design and manage the urban transportation system including roads, transit systems, bike paths, and pedestrian routes. Local governments also manage waste collection and disposal, recycling and, in some places, composting programs. Local governments may be involved in creating district heating/cooling systems, building retrofit programs, and other energy-related programs. They may also have sustainable procurement policies, such as a requirement that new municipal buildings be LEED certified. Municipalities own and manage the system of public parks and provide other quality of life amenities such as recreational and cultural centres. Some larger municipalities or municipally mandated agencies are directly involved in supplying affordable housing (e.g., in Toronto, Montreal and Vancouver).



Although governments have a major impact on the growth of cities, their infrastructure, and environmental performance, it is the private sector that actually builds much of the city. In many Canadian cities, most of the developable land in and around the city is in the hands of a limited number of large landowners who use their economic and political influence to shape growth to suit their interests. These actors form the hub of the so-called “growth machine”, which includes the full range of interests related to land development, such as energy (hydro, gas and oil) utilities, civil and transportation engineering firms, financial institutions, architects, landscaping companies, and construction firms, all of which help to shape urban development. The growth machine lobbies for government policies and investments that will facilitate land development with the least amount of restrictions and costs to private actors.

The public interest is represented by a wide range of non-governmental organizations (NGOs) whose mandates focus on some aspect of urban sustainability. Most of these organizations are local in scope, reflecting their community-based goals. Some local groups address a range of urban environment issues such as Sustainable Calgary, Toronto Environmental Alliance (TEA), and Équiterre. Other groups focus on specific local environment issues such as Edmonton Bicycle Commuters Society, City Green, Delta Recycling Society, and Hamilton Coalition on Pesticide Issues, to name a few. A small number of the NGOs that are specifically focused on urban sustainability issues operate at the provincial or national level. These include, for example, Green Communities Canada, Vivre en Ville, Better Environmentally Sound Transportation, Ontario Smart Growth Network, Smart Growth Canada Network, Transport Action, and Evergreen.

A number of provincial and national NGOs with broader environmental mandates have become involved in certain aspects of the urban environment agenda. For example, at the provincial level: West Coast Environmental Law (WCEL has become closely identified with smart growth/urban growth management in B.C.); Ontario Nature (sprawl); Conservation Council of New Brunswick (recycling and sustainable transportation); Resource Conservation Manitoba (recycling and sustainable transportation); and Halifax’s Ecology Action Centre (urban development and transportation).

National ENGOS that have also engaged in urban sustainability issues include: the David Suzuki Foundation (urban sprawl, energy conservation, sustainable behaviour); Environmental Defence (greenbelts, land use, green cars); Canadian Environmental Law Association (urban pesticides, land use planning/sprawl, urban water quality); Pembina Institute for Appropriate Development (community energy planning and use, community right-to-know, urban development); the Sierra Club Canada (community sustainability); and the Canadian Urban Institute (research, networking, leadership development).



The Federation of Canadian Municipalities (FCM) and the Green Municipal Fund within FCM are also critical players in the urban sustainability arena in Canada. Endowed with \$550 million by the federal government, the Green Municipal Fund offers funding and knowledge to municipal governments and their partners for environmental projects. FCM proper works to influence federal policies that are relevant to the building of strong sustainable communities across the country and environment is a priority issue for the organization. The innovative efforts of municipalities with respect to urban sustainability are recognized by FCM through their Green Champions Awards and Sustainable Communities Awards.

A number of academic institutions conduct research and undertake policy analysis in fields related to urban sustainability. In BC, the University of British Columbia (UBC) School of Community and Regional Planning, the UBC Design Centre for Sustainability in the School of Architecture and Landscape Architecture, and Simon Fraser University's Centre for Sustainable Community Development are all well-recognized nationally for their work on urban function and design. The City Institute at York University and the Learning City Program at Simon Fraser University are also leaders in their field. In Ontario, academic institutions such as the Transportation Engineering department at the University of Toronto, and think tanks such as the Neptis Foundation and the Pembina Institute have helped raise awareness about the need for more sustainable approaches to community planning by quantifying the problems of "business as usual" and projecting the consequences of inaction, many of them unwelcome.

Key constraints

This brief overview of urban governance reveals an important constraint with respect to urban sustainability issues: while sustainability requires an integrated, systems approach, governance is in fact fragmented among different levels of government. Many medium and larger-sized cities have multiple levels of government: e.g., in the Montreal region, there are borough councils (for neighbourhood issues), the City of Montreal, the Agglomeration Council (for the Island of Montreal), the Montreal Metropolitan Community (for the Greater Montreal Region), the provincial government and finally, the federal government. The various levels of government often work at cross-purposes from a sustainability point of view. For example, in most provinces, the provincial government has primary responsibility for planning the highway and major transit network and this may be done in way that works against municipal sustainability plans.

The fragmentation we find among levels of government is also found within government levels. In municipal governments, for instance, land use and transportation, although intimately linked from a sustainability point of view,

The Federation of Canadian Municipalities and the Green Municipal Fund within FCM are critical players in the urban sustainability arena in Canada.



Another issue of relevance to urban sustainability is the limited authority and ability of municipalities to address key concerns, compared to the high level of expectation placed on them by residents and advocates of urban sustainability.

are managed in separate departments that sometimes communicate poorly. Fiscal instruments such as development charges and property taxes are developed in the finance department with little or no input from planners, despite the fact that these instruments have a major impact on land use patterns.

Another issue of relevance to urban sustainability is the limited authority and ability of municipalities to address key concerns, compared to the high level of expectation placed on them by residents and advocates of urban sustainability. Municipalities, unlike federal or provincial governments, have tightly restricted powers. Under certain regulatory contexts, municipalities may not have the power to implement innovative approaches to sustainability. Additionally, the majority of municipal funding is allocated to providing basic services such as fire, police, roads, water and sewers; thus, many municipalities do not have the funding to undertake or implement sustainability initiatives. It is especially difficult for champions of a new initiative to obtain the resources needed to build the case for a new program.

Fiscal pressures on municipalities have increased in recent years through the downloading of provincial responsibilities to the municipal level, including in some jurisdictions, transit, social welfare, education, and housing programs. This increased burden on municipalities has not always been matched by increased funding from the provinces, resulting in severe budgetary pressures on municipalities. This has sparked greater interest at the local level in diversifying the sources of revenue and in some cases, such as Toronto, the provincial government has responded by allocating additional revenue raising powers.

A looming crisis facing urban regions in Canada is the so-called infrastructure deficit, i.e., the accumulated unfunded infrastructure replacement and maintenance needs of transit facilities, drinking water and sewage systems, and urban road networks. Deteriorating infrastructure results in a massive loss of potable water, substandard sewage treatment, congested roads, inefficient transit systems, and other consequences with important environmental, health, social and economic dimensions. On the one hand, urban sustainability may entail a higher level of infrastructure investment in the short term (e.g., increased transit expenditures or setting up a composting service). On the other hand, it could help address the infrastructure squeeze by achieving long-term savings through better management of growth (e.g., by reducing demand for expanded facilities). Effective policy integration and good long-term planning can save resources and, therefore, money.

Another key governance issue is the changing role of the federal government in urban issues. In the mid-2000s, urban issues became a stated priority of the Liberal government through its “New Deal for Cities and Communities”, including new funding for urban infrastructure flowing in part from the gas tax. This funding was linked to urban sustainability through the requirement that communities interested in receiving funding from this source



prepare an integrated community sustainability plan, of which hundreds have been prepared. The increasing importance of urban issues on the national stage was evidenced by the creation in 2004 of a new ministry, Infrastructure Canada, with a Minister of State (Infrastructure and Communities). While the Conservative government has maintained most of the existing infrastructure funding programs, it clearly does not have an urban policy focus. There is at present no Minister of State or other policy focus for urban issues within the federal government and it is widely thought that the government's level of interest in urban sustainability issues is low.

In the face of growing constraints and looming crises, it is not surprising that a consensus is gathering in our society that governments alone cannot solve urban sustainability issues. There is a growing expectation that civil society will step in to perform educational, research, and planning roles, help launch new programs, and invest in change, often in partnership with governments. Philanthropic donors have a critical role in supporting these emerging functions and moving our cities closer to sustainability.





Urban sustainability issues and organizations

Urban sustainability issues

The key theme that emerged from the interviews conducted for this brief is that urban sustainability is much more than “environmental issues in cities”. Although it obviously includes environmental issues – such as mitigating greenhouse gas emissions, reducing energy use, and creating more green spaces – the sustainability perspective brings another dimension to these considerations. Specifically, interviewees stressed that a sustainability perspective means 1) seeing the host of environmental issues in cities as interconnected, and 2) seeing environmental, social and economic issues within cities as intimately linked.

When asked to identify the key issues related to urban sustainability in cities today, few interviewees rhymed off a list of disconnected environmental issues. Most of them prefaced their thoughts by saying that environmental issues are interlinked in cities. Of course, this makes eminent sense – cities are tightly knit locales where issues, like the people who care about them, bump into each other regularly. Solving one issue is often not possible without recognizing, if not addressing, a host of other linked issues. One example of this is, of course, the issue of urban sprawl, which includes issues related to preserving greenspace in the peri-urban area, travel habits, infrastructure provision, fiscal issues, food supply, and so on.

Interviewees also strongly emphasized the linkage between environmental and social/economic issues in urban areas. They noted that solutions to environmental problems should not harm already marginalized groups in society and that we should look for win-win solutions that advance both environmental and social agendas. A green city, they noted, should not be a city for elite



social groups and from which others are excluded from benefitting. Many interviewees emphasized that because urban sustainability requires a high degree of social cohesion, it can only be approached through the democratic participation of all sectors of society.

A strong message from the interviews is that if we wish to move forward in our thinking about urban sustainability issues, we must take a systems point of view, i.e., to see the city as a system of interacting processes and in particular, the planet's most important intersection point between humanity and nature. A systems perspective assists us in thinking about cities because it highlights the importance of feedback loops, balancing mechanisms and tipping points, all of which are important in understanding how cities grow and develop.

Looking at a city as a system has important implications for the attitude of grantmakers interested in becoming (more) involved in this field. First of all, it means that resources should be applied in a strategic manner that can help produce systemic change. As some interviewees noted, programs to reduce plastic bag use or supply food to food banks are laudable but do not have the potential to trigger fundamental change in the urban system. To accomplish meaningful change, grantmakers need to have a solid analysis of where the key intervention points are. These points are likely to be those found at the intersection of a variety of environmental issues and that have linkages with social and economic goals. We turn now to a consideration of the key issues.

Managing urban growth

Urban sprawl refers to the spread of the urban area in a low density, car-dependent fashion, principally through the addition of single-use developments (i.e., residential, commercial, institutional, or offices). Sprawl has been taking place for at least 100 years but accelerated enormously after WWII due to the introduction of low-cost automobiles, cheap gas, federal and provincial subsidies to extend infrastructure, and long-term mortgages. While sprawl in Canada has not been as marked in the US (where racial and social inequality issues drove middle-class people out of city centres to the burgeoning suburbs), it remains an important issue: between 1971 and 1996, the urban population of Canada grew 37%, while the amount of urbanized land grew 77%.

Much of the land being converted to urban uses is prime agricultural land, but urbanization is also an important cause of deforestation, wetland destruction and other forms of ecological and habitat loss. Food is increasingly transported from far-flung locations in order to get to urban markets. Only a few provinces (Quebec, Ontario and BC) have agricultural reserves that protect high-quality farmland from urbanization.

The ability of cities to accommodate a population with the least environmental impact is eroded by sprawl as low densities undermine the efficiency of public transit and other municipal services that reduce environmental stress (e.g., recycling programs). Due to their car-dependent and low-density na-

Most provinces have policies on the books that would temper sprawl (e.g., by encouraging municipalities to plan for farmland preservation, efficient infrastructure use, and a mix of housing types) but the economic forces driving sprawl often overwhelm these rather flimsy policy restrictions.

ture, sprawled cities consume much more energy for transportation and heating/cooling and produce far more greenhouse gases than more compact ones (e.g., European cities use about 40% less energy than their Canadian counterparts). Sprawled cities are also less efficient from an economic point of view, requiring more expensive infrastructure to service its population.

Over the last 20 years, urban sprawl has gradually gained importance as a public issue in Canada as the negative impacts associated with sprawl have themselves burrowed into public awareness, especially climate change, the infrastructure deficit, public health issues, and the loss of agricultural land. A consensus has emerged among many urban planners, architects, academics, NGOs and foundations that sprawl needs to be slowed and that more development should take place in already urbanized areas, such as on brownfields², greyfields³, parking lots, around transit stations, and so on. Most urban plans in Canada now promote “smart growth”, i.e., intensification instead of greenfield development, and neighbourhoods with a mix of uses and higher densities, especially around transit stations. Many metropolitan areas are also undertaking regional plans in order to coordinate anti-sprawl efforts across municipal jurisdictions.

Most provinces have policies on the books that would temper sprawl (e.g., by encouraging municipalities to plan for farmland preservation, efficient infrastructure use, and a mix of housing types) but the economic forces driving sprawl often overwhelm these rather flimsy policy restrictions. BC’s Growth Strategies Act has created reasonably effective growth management regimes in that province’s major urban areas and Ontario’s efforts to reign in sprawl in the Greater Golden Horseshoe (through the Places to Grow Plan, the Greenbelt Plan, and other measures) have been widely lauded but it is too early to assess their effectiveness.

Research and policy advocacy

Nonprofits have been leaders in applied research on sprawl and smart growth in Canada. Vivre en Ville is a provincial nonprofit in Quebec that has done advocacy, research and public education on this issue. The group produced a three-volume manual on sprawl and more livable communities in 2004 and recently produced a 20 minute animated movie on the same subject. Smart Growth BC⁴ (now folded into the Canadian Green Building Council⁵ but basically inactive) was very active for over a decade in terms of research on sprawl and more compact, complete and livable communities. The West Coast Environmental Law Association has published a number of smart growth re-

2 Brownfields are former industrial lands, often with soil contamination, that are ripe for redevelopment.

3 Greyfields are commercial facilities and the surrounding parking areas that are no longer economically viable.

4 www.smartgrowth.bc.ca

5 www.cagbc.org



sources, such as the Smart Growth Guide to Local Government Law and Advocacy.⁶ The Neptis Foundation⁷ has conducted high-quality research on sprawl, smart growth, and other regional planning issues in the Toronto region. The Pembina Institute⁸ developed considerable expertise on managing urban growth in Ontario and published many reports on this topic leading up to the introduction of the Places to Grow Act in Ontario. National organizations, such as the David Suzuki Foundation⁹ and the Sierra Club Canada¹⁰ have also developed citizen activism resources to help mobilize local opposition to sprawl and build a constituency for more livable cities.

A few academics across the country are also studying sprawl and regional planning, in some cases with foundation support. For example, research is underway at the University of Calgary into Ecological Infrastructure, Resilience and Governance in the Calgary Region. The goal of this initiative is to develop an innovative methodology that incorporates landscape/urban ecology and ecological infrastructure into strategic policy planning for regional development for the Calgary region. The work is to be conducted in an integrated research and practice partnership between the Faculty of Environmental Design¹¹ and the Calgary Regional Partnership¹² to help guide policy, planning and management of the region.

Increasing attention is being given to fiscal instruments as a way of discouraging sprawl and encouraging more compact urban form. Sustainable Prosperity is a national research and policy organization, based at the University of Ottawa, which focuses on market-based approaches to policy development.¹³ Its Sustainable Communities program has examined a variety of issues related to sprawl, including the use of development charges (which developers pay to municipalities to help fund infrastructure like roads, water, and sewage) to steer development into more compact forms. Sustainable Prosperity has also done research on Environmental Pricing Reform, such as road tolls and gas taxes, as a way of stemming sprawl and boosting public transit demand.

In Alberta, the Miistakis Institute, a nonprofit research outfit affiliated with the University of Calgary, is conducting research and advocating for policy changes related to Transfer of Development Credits (TDC).¹⁴ TDC programs allow municipalities to direct development away from areas that are designated for preservation (e.g., farmland or natural areas on the ur-

6 wcel.org

7 www.neptis.org

8 www.pembina.org

9 www.davidsuzuki.org

10 www.sierraclub.ca

11 evds.ucalgary.ca/content/about-environmental-design

12 www.calgaryregion.ca/crp

13 www.sustainableprosperity.ca/Sustainable+Communities+EN

14 www.rockies.ca/project_info.php?id=45



ban periphery) and toward more suitable areas.¹⁵ The Miistakis Institute has been engaged with a number of municipalities including Red Deer County, the Municipal District of Bighorn and the Beaver Hills Initiative, as well as the provincial Land Use Secretariat to explore how Transfer of Development Credits could work in Alberta. The research is funded in part by the Alberta Real Estate Foundation.

Direct involvement in city/regional planning

Nonprofits are increasingly involved in efforts to influence the outcome of municipal and regional planning exercises. In the Toronto region, NGOs were directly involved in lobbying for and helping to set up Ontario's Greenbelt, with funding from several foundations (see Box). The success of the Greenbelt in Ontario has helped inspire a movement to create a counterpart in the Halifax region, led by Our HRM Alliance (see Box). This is part of the HRM Alliance's campaign to use the current regional planning process to stop sprawl and revitalize city centres in Halifax. In Calgary, Civic Camp uses its online presence to intervene in municipal planning exercises and push for smart growth measures (see Box). In Edmonton, the Greater Edmonton Alliance – a coalition of member groups such as labour unions, faith-based groups, community groups, and teacher associations – lobbied City Council and intervened in the public consultations on the Municipal Development Plan to get policies added that would help protect the remaining farmland within the municipality's boundaries.¹⁶

Long-term planning and visioning

Canadian cities are increasingly engaged in efforts to steer growth over longer time frames (up to 100 years) based on a community vision. These exercises are sometimes funded by philanthropic or private sector donors and involve a partnership among municipalities, consultants, and academics. One of the most comprehensive examples of long term visioning is the citiesPLUS (Partners in Long-term Urban Sustainability) project in Metro Vancouver. This 100-year plan was a partnership among the Greater Vancouver Regional District, the Sheltair Group, and the University of British Columbia's Liu Institute for Global Issues,¹⁷ with funding from the Canadian Gas Association. The Sustainable Cities: PLUS Network that emerged from this effort is a growing network of cities and regions around the globe that are committed to developing long term plans that integrate economic, ecological and social well-being and build community resilience; eleven Canadian cities are members.¹⁸

15 Landowners in designated TDC conservation areas or 'sending areas' are given credits that they are able to sell on an open market to landowners/developers in designated TDC development areas or 'receiving areas', who in turn are able to increase development potential (e.g., increased housing units/acre, increased parking spaces, increased building heights, etc.) beyond the base amount allowed by zoning.

16 greateredmontonalliance.com

17 www.ligi.ubc.ca

18 sustainablecities.net



Civic Camp, Calgary



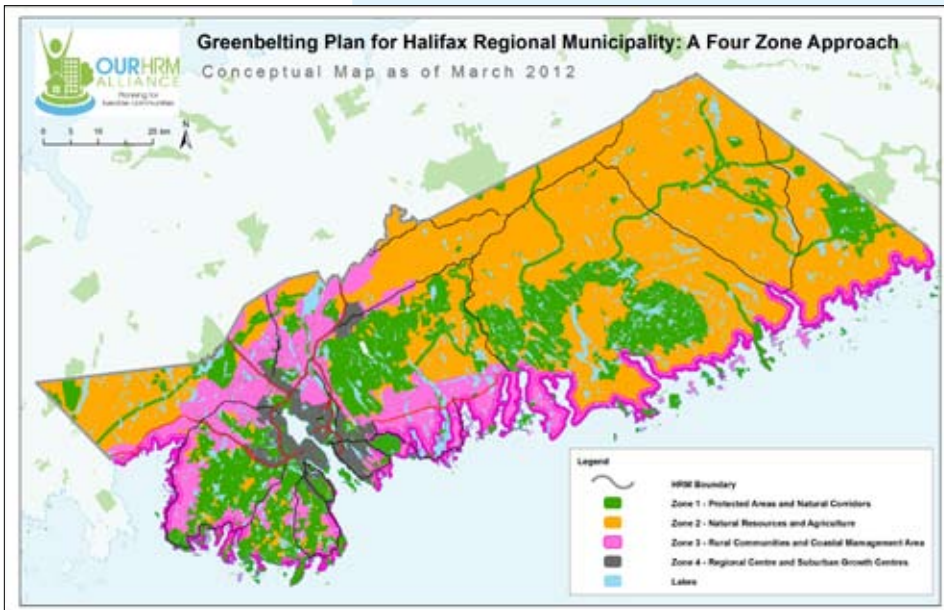
Civic Camp is a nonprofit grassroots group in Calgary that emerged in 2008 in order to influence the planning process related to the revision of the city's Municipal Development Plan (MDP). Civic Camp advocated for strong anti-sprawl policies in the plan. It conducted its work through direct lobbying, participating in public hearings and organizing public events. The organization was created through the collaboration of two pre-existing groups, Sustainable Calgary and Better Calgary, as a vehicle to bring citizens together to discuss planning issues and catalyze active citizenship. It has gained a high profile in Calgary because of its innovative methods and due to the fact that the current Mayor was a co-founder of the organization. It has no office space or permanent staff but works through an informal structure that relies on the power of social networking. The group has spun off several other groups that use similar methods: Transit Camp, Great Public Spaces, and Bike Calgary. The leaders of the group call the model they use 'unorganization'. This approach depends on the Internet – especially Facebook and Twitter– for its effectiveness to connect people and distribute information. For example, when a public hearing was held on revisions to the MDP, the network was used to notify people and encourage them to attend. Over 100 people presented briefs at the hearing. Some city councilors also follow Civic Camp's tweets, which further magnifies the group's influence. The group has become the "go to" source on planning issues for the local media and is invited to participate in and comment on planning issues on a regular basis. The group has about 10 core members and 500 online participants. The model is very effective but has an obvious downside: the organization depends on a few dedicated volunteers to maintain the website and coordinate campaigns. The group operates with a minimal budget. First Calgary Financial Credit Union and The Calgary Foundation have given the group small grants. The group is considering moving to a more formal structure with a staff person, if funding can be found.

Our HRM Alliance, Halifax Regional Municipality¹⁹

Halifax Regional Municipality (HRM) is one of the largest (in size) municipalities in Canada. Amalgamated in 1996, the municipality is roughly the size of PEI, including the former municipalities of Halifax, Dartmouth, and Bedford plus many small fishing villages and large swathes of rural land. Sprawl has been a serious issue in the area, with rural residential estate developments, low-density suburbs, and auto-dependent industrial parks draining population and businesses from the central area. At present, downtown Halifax and Dartmouth have many boarded up businesses while malls continue to be built on the outskirts. Our HRM Alliance is a coalition of 40 groups from diverse (and sometimes adversarial) sectors that have come together to stem sprawl and revitalize (and densify) the downtown and local centres. The alliance, which includes

business, environmental, and community groups, is a reflection of the growing consensus in the region that something has to be done about urban sprawl. One of the group's key proposals is for the creation of a greenbelt around the city to preserve green areas and act as a barrier to further suburban, exurban and leapfrog development. The group focuses on public education and awareness (e.g., it works directly with city staff on municipal planning and finance committees, puts on public lectures with prominent speakers from other parts of the country,

and monitors the implementation of the 2003 HRM regional plan). The group has been very successful in placing sprawl on the political agenda in the context of the current (2012) regional plan review and municipal election (all mayoralty candidates support the group's goals). The group was inspired in part by the successful greenbelt initiative in Southern Ontario and Bruce Lourie, President of the Ivey Foundation, has been an active advisor to the group. Funding for the group is coming from the Ivey and McConnell foundations, plus donations from individuals and businesses (such as Mountain Equipment Co-op).²⁰ Funding from national foundations has given the group the resources it needs to operate in the short term and boosted its credibility among local stakeholders. The Ecology Action Centre (a registered charity) leads the group and administers its finances. The group's annual budget is about \$100,000. It could benefit from long-term stable funding in order to create a staff position committed to this issue, conduct research, develop a social media presence, and build technical capacity (such as GIS mapping of the proposed greenbelt), but local sources for urban sustainability issues are scarce.



¹⁹ HRMalliance.ca

²⁰ The group has a strict conflict of interest policy and does not accept donations from businesses in the targeted revitalization areas.



Bottom line

This is a complex issue with a large number of entrenched interests supporting the status quo. The best way for nonprofit groups to have an impact appears to be through public education and coalition building among diverse interests. Progress appears to depend on supportive provincial and municipal political contexts. Not every region experiencing sprawl has a nonprofit organization with the scope and capacity to address this issue. Funders may need to help develop this capacity in close association with the target group. Long-term funding is needed for staff resources and technical capacity building. Resources are also needed to conduct research, e.g., the costs of sprawl and the impact on governments, businesses and communities. Finally, resources are needed to develop policy ideas that will help reign in sprawl, such as using development charges, transfer of development rights, or reformed property taxes to discourage horizontal urbanization (i.e., sprawl) and to encourage vertical urbanization (i.e., intensification).

Active and public transportation

Closely related to urban sprawl is the issue of car dependency. This term refers loosely to the panoply of problems associated with the dominance of cars as a form of transportation in our society, including energy over-use/climate change, air pollution, sedentary lifestyles and obesity, and the deterioration of the quality of life in our cities due to the noise and danger posed by traffic. Traffic congestion in larger cities is not only an important environmental issue, but is now being seen as a key economic issue (due to lost time and late delivery of cargo). Yearly costs in the Toronto and Montreal regions are estimated to be in the order of \$2 billion each.

Although historically below that of the US, car ownership and use in Canada has neared US levels in recent years, with 600 people out of 1000 now owning a personal vehicle and driving an average of 18,000 kms per year. In the last 25 years, Canada's population increased by one-half, but the number of automobiles doubled to almost 20 million. About 75 percent of all commuting trips in Canada are by private automobile.

Car dependency is driven not only by urban sprawl, but by low gas prices (compared to Europe) and subsidies for car infrastructure (roads, highways, bridges, tunnels, ferries, etc.) and underpriced parking, which make automobiles artificially inexpensive to operate. Changes in production processes are adding to motor vehicle traffic as factories move to just-in-time deliveries that favour transport trucks rather than slower but more fuel-efficient trains. In addition, municipal planning approaches have tended to promote heavy use of cars by favouring more and bigger roads over urban designs that promote public transit, biking and walking.

There is at present a broad coalition of forces favouring the reduction of car usage and a shift to public transit, walking and biking in urban travel. Many local governments are promoting walkable neighbourhoods in their

community plans and senior governments are increasing funding for transit infrastructure. Many cities have groups that are advocating for greater investment in transit infrastructure and services, a reduction of highway spending, restrictions on car usage (such as reduced speed limits, traffic calming measures, and road tolls), more bike routes and better pedestrian facilities. These organizations are fighting what they see as an outmoded car-based paradigm heavily entrenched in provincial transportation ministries, municipal engineering departments, trucking associations, the Canadian Automobile Association and other pro-car agencies.

Discourage car use through wiser pricing

This includes calls to use “road pricing” to encourage modal shift, reduce congestion and raise money for public transit, or to impose higher parking fees and eliminate employer-paid and other “free” parking subsidies for motorists. The best known group in this field is Transport Futures, in Toronto, which has been organizing multi-sectorial conferences to explore this topic from a number of angles.²¹

Transit promotion

Direct investment in transit has been shown to boost ridership and reduce car usage (in combination with other travel demand measures). Transport Action Canada²² (formerly Transport 2000) and its provincial affiliates provide national, provincial and regional voices in favour of transit investment and efficiency measures. Some regions of the country have strong pro-transit lobbies made up of regional and national NGOs. In Halifax, a pro-transit lobby is part of the HRM Alliance campaign (see Box). Transit Toronto lobbies for greater transit investment there and Civic Action has just created the Regional Transportation Champions Council to mobilize the public and channel input into Metrolinx’s (the regional transit planning agency) Investment Strategy (funding plan) for regional transit in the Greater Toronto and Hamilton Area.²³ Also in Toronto, Evergreen’s City Works project²⁴ is launching (with funding from the Toronto Atmospheric Fund) a Transportation Lab. The lab will examine “wicked” urban sustainability problems — starting with building multi-stakeholder support for investments in regional transit. In Calgary, Transit Camp (an offshoot of Civic Camp – see above) lobbies the city for greater investments in public transit through direct contact with city officials and organizing public events. In Montreal, Transit recently formed as a coalition of NGOs to promote transit investment in that city (see Box). The Livable Region Coalition opposes highway expansion and promotes greater investment in public transit in the Lower Mainland of BC.²⁵

21 www.transportfutures.ca

22 www.transport-action.ca

23 www.civicaction.ca/civicaction-announces-new-regional-transit-champions-council

24 cgc.evergreen.ca

25 www.livableregion.ca



Transit, Montreal QC

Transit²⁶ is a coalition among local, provincial and national groups, including the Montreal Urban Ecology Centre, Vivre en Ville, the David Suzuki Foundation, the Conseil régional de l'environnement de Montréal (CREM), and Transport 2000 (the Quebec branch of Transport Action Canada), among others. The principal aim of the group is to push the Quebec government to increase investment in public transit and reduce funds going to building new highways. The group works through public awareness campaigns (such as press releases and op-ed contributions), coalition building (with public health agencies, environmental groups, and even the truckers association), and direct lobbying of government officials. They have helped increase pressure on the Quebec government to increase the emphasis it places on public transit in its climate change mitigation plans. The group is encountering resistance from suburban politicians and the entrenched culture of car-dependency that is found in such areas. They receive a small amount of funding (around \$25,000) from the Montreal Public Health Agency and the Quebec Ministry of Health while the partners contribute staff and other in-kind resources. The group employs a part-time communication specialist. Resources are needed for research and data gathering, public conferences, and building a team of committed professionals.

Flickr



An emerging type of transit-promotion initiative is called the Transit Camp, a new model for collaboration and “peer production” between transit professionals, researchers, IT developers, academics, transit users, transit advocates, and others. A Transit Camp usually takes the form of a “hackathon” or an “un-conference” where people come together to propose solutions in a creative and collaborative atmosphere. During the event, any participant is allowed to propose a working group to focus on a pro-transit initiative and results are presented at the close of the event. Solutions often have a life beyond the event as participants continue their collaboration “off-line”. Transit Camps have been held in Vancouver, Toronto, Edmonton, and Montreal. They are typically organized by enterprising nonprofits. The event in Montreal was organized by the Living Lab de Montréal, a nonprofit with support from the City of Montreal, Équiterre, the Metropolitan Transport Agency, and others.²⁷

²⁶ www.transitquebec.org

²⁷ www.livinglabmontreal.org

Transportation demand management

The concept of transportation demand management (TDM) includes the full range of strategies that results in more efficient use of existing transportation resources, including pooling employee commuting and encouraging transit to work, car-sharing networks, staggering work hours, telecommuting, high-occupancy vehicle (HOV) lanes, and the use of IT to reduce congestion on highways and major roads. Local transportation management associations (TMAs) have been set up in some communities to coordinate carpooling and to educate employers, residents, workers and others on transportation strategies and the benefits of TDM. While municipalities play a lead role on these organizations in many communities across the country, community nonprofits have also been active. Set up in 2001, the Black Creek Regional TMA in northern Toronto is one of the oldest TMAs in Canada.²⁸ The organization (now called Smart Commute – North Toronto, Vaughan) served as a model for the creation of a network of TMAs in the Greater Toronto Area and Hamilton, most of which were created as part of the regional Smart Commute initiative funded by Transport Canada's Urban Transportation Showcase Program and local governments.²⁹ In Quebec, Vivre en Ville launched a transportation demand management initiative for the cities of Quebec and Gatineau.³⁰ In Winnipeg, Green Action provides local businesses (with support from the Winnipeg Foundation, Mountain Equipment Co-op and others) with resources and presentations on workplace commute options.³¹

Cycling and walking promotion

Most medium and large cities in Canada have bicycle promotion groups that lobby for better bike and walking facilities (paths, parking, bike boxes, crosswalks, etc.), help the city develop active transportation plans, undertake research, create guides and toolkits, organize events, and provide services to their constituencies (e.g., safety education for bicyclists). Capital Bike and Walk in Victoria,³² Vancouver's HUB (formerly the Vancouver Area Cycling Coalition),³³ Bike Calgary,³⁴ Vélo Québec,³⁵ the Toronto Centre for Active Transportation³⁶ and Cycle Toronto (formerly the Toronto Cyclists Union)³⁷ are good examples of such groups. These groups often receive some funding from the municipality and get project-based funding from local foundations and sponsoring businesses. Walking groups are often funded by public health agencies or provincial health ministries. Some walking initiatives focus specifi-

28 www.smartcommutentv.ca/en/home

29 www.smartcommute.ca/en/home

30 vivreenville.org/activites/accessibilite-mobilite-et-transports-viables

31 greenactioncentre.ca/program/workplace-commuter-options

32 www.capitalbikeandwalk.org

33 bikehub.ca

34 bikecalgary.org

35 www.velo.qc.ca

36 www.torontocat.ca

37 bikeunion.to



cally on children, such as Vélo-Québec’s Safe to School program (funded by Québec en forme – see below) and the Ecology Action Centre’s Active and Safe Routes to School program in Halifax (funded through the Thrive program, part of the Nova Scotia Department of Health).³⁸ Well-known national pro-walking organizations include Canada Walks³⁹ (part of Green Communities Canada), which partners with local nonprofits and public health agencies (especially in smaller cities) to do capacity building on walkable communities (e.g., training with city staff, presentations and walkability tools like checklists and other resources).

The Healthy Communities movement is a strong promoter of walking and biking in Canada as these activities tend to prevent health conditions such as obesity, hypertension and diabetes. Healthy Community initiatives bring together local stakeholders (municipal planning, public health, transportation, school board, etc.) to promote public health through environmental design, community engagement, and integrated planning. There are currently four provincial healthy community networks (NB, QC, ON, and BC) and a newly formed Canadian network.⁴⁰ The networks advocate for healthy community policies and provide resources and networking opportunities to researchers, policy makers and practitioners in the field. The Canadian Partnership Against Cancer (funded by the federal government) is funding healthy community research and initiatives through its CLASP (Coalitions Linking Action and Science for Prevention) program.⁴¹

Cycle Toronto

Cycle Toronto, formally known as the Toronto Cyclists Union, is a membership-based organization that works alongside citizens, community groups, bike shops, and the City towards the common goals of ensuring that cycling remains a legitimate, accessible, and safe means of transportation for all Torontonians. In particular, the organization encourages newcomers to learn about cycling via the unique Newcomer Cycling Outreach program, a partnership with Ontario’s CultureLink Settlement Services. The project promotes the integration of newcomers in the Greater Toronto Area by fostering cycling transportation as an affordable, healthy, and convenient option – and connects newcomers to the wider cycling community in the city.

38 thrive.novascotia.ca/stories/active-and-safe-routes-to-school

39 www.canadawalks.ca

40 www.chc-csc.ca

41 www.partnershipagainstcancer.ca/priorities/primary-prevention/strategic-initiatives/coalitions-linking-action-science-for-prevention-clasp

An interesting recent development related to this issue is the spread of so-called “Jane’s Walks” in cities across Canada. Named after urban activist and writer Jane Jacobs, Jane’s Walks are held annually during the first weekend in May to coincide with her birthday. The free walks are led by anyone who has an interest in the neighbourhoods where the walks take place. They often touch on themes related to architecture, social issues, and natural heritage. The event emphasizes the importance of walking as a way of connecting to community and is sometimes used to highlight barriers to neighbourhood walkability. Since the first Jane’s Walk in Toronto in 2007, the event has spread to cities across North America. Over 40 Canadian cities have participated in Jane’s Walk including Calgary, Halifax, Montreal, Ottawa, Sudbury, Toronto, Vancouver, Victoria, Waterloo, Kitchener, Windsor, and Winnipeg. The walks are usually delivered by local nonprofits using volunteer walk leaders and with funding from corporate, municipal, and foundation donors. In Toronto, for example, the walks are organized by the Centre for City Ecology, with funding from Tides Canada and other donors.⁴²

Social enterprise

Transportation services lend themselves to enterprising nonprofits. Here a few examples:

- **Car sharing:** Many car-share operations are organized as nonprofit coops in Canada (an exception is Quebec’s Communauto,⁴³ a for-profit enterprise). For example, the Regina Car Share Coop⁴⁴ and the Calgary Alternative Transport Coop⁴⁵ have been running small car-share operations for several years. While these initiatives are often started with foundation assistance (e.g., The Alberta Ecotrust Foundation and The Calgary Foundation helped start the Calgary group), they quickly move on to become financially self-sufficient.
- **Bike services:** In Vancouver, BEST (Better Environmentally Sound Transportation)⁴⁶ offers a bike parking valet service at festivals and other outdoor events.⁴⁷ The organization brings its own bike racks, signage and table. The service is free to users (the event organizers pay for the service) and BEST staff use the opportunity to sign up new members for the organization. Another interesting social enterprise initiative in Vancouver is Shift, a trike delivery service which is making use of the city’s new bike infrastructure (i.e., separated bike lanes) in the downtown area to deliver office supplies, catering, and other cargo. This workers’ coop started with funding from the Vancouver Foundation and is growing rapidly.

⁴² www.cityecology.net

⁴³ www.communauto.com

⁴⁴ www.reginacarshare.ca

⁴⁵ calgarycarshare.ca

⁴⁶ best.bc.ca

⁴⁷ thebicyclevalet.ca



- **Transportation management services:** Enterprising nonprofits are offering transportation management services to companies, municipalities and other organizations in order to reduce car dependency. In Quebec, for example, there are five Centres de gestion des déplacements (Transportation Management Centres): Montréal, Québec, Sherbrooke, Saguenay and Trois-Rivières, each run by a different NGO. The centres work with employers to reduce solo-car commuting in favour of ride-sharing, transit, biking and walking. The program in Trois-Rivières, called Roulons Vert, is run by a group called Vire-Vert.⁴⁸ In Ottawa, similar services are provided by EnviroCentre, an enterprising nonprofit that also does home energy retrofits.⁴⁹ Similar outfits can be found in most cities across the country.

Bottom line

Improving cities for active and public transit is being driven by a desire to improve the quality of life in cities, reduce traffic and improve public health. Most of the nonprofit work on these issues is being done by local groups with municipal, provincial or foundation support. While much is being accomplished through public awareness, policy advocacy, and participatory planning initiatives, progress on the ground ultimately requires substantial public investment in infrastructure, which means progress can only be made with a strong research and advocacy community. Achieving sustainability goals in this field also requires fundamental changes in public attitudes and behaviour towards transportation options. This means that much work is to be done on public education and social marketing of alternatives to car usage.

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Public spaces

Closely related to both sprawl and the movement to make Canadian cities more transit, biking and walking friendly are initiatives focusing on the redesign of public spaces in existing neighbourhoods. These initiatives generally have the objective of involving residents and other stakeholders in the creation of a sense of place that reflects local values and improves walking and biking facilities. Initiatives usually concentrate on the public realm, e.g., the design of roadways, parks, plazas, bicycle and pedestrian facilities, connections between active modes (e.g., ensuring good pedestrian access to a transit station). The driving forces include the desire to improve the quality of life in cities, tame traffic, and improve public health. The increasing numbers of urban dwellers living in smaller housing units mean that public space is becoming a more important factor in the quality of life (the “outdoors living room”). Also, the aging of the population is highlighting the need to make public spaces more pedestrian friendly. The movement to improve public spaces is at the intersec-

⁴⁸ oraprdnt.uqtr.quebec.ca/pls/public/gscw031?owa_no_site=1533&owa_no_fiche=1&owa_apercu=N&owa_imprimable=N&owa_bottin=

⁴⁹ envirocentre.ca

tion of public health, urban livability, public transit promotion, recreational opportunities, and democratic participation in the design of urban space.

Design of public spaces

In Montreal, the Green and Healthy Neighbourhoods program is a good example of how existing neighbourhoods can be retrofitted for active transportation through community-based planning and design. The program is led by the Montreal Urban Ecology Centre (MUEC). The long-term goal of the program is to shift the culture of planning neighbourhoods away from a preoccupation with the needs of motorists towards one that better responds to the needs of pedestrians, bicyclists, and public transit users. To date, four neighbourhoods in Montreal have been targeted for redesign. In each neighbourhood, the MUEC carries out public consultation to identify key issues and proposes practical solutions in a planning document. The Centre works with local stakeholders (including resident groups, municipal officials, transportation agencies, business leaders and so on) to build commitment and obtain resources to implement the plan. The program has resulted in many subtle improvements (such as narrowing roadways, installing bike parking, closing lanes to car traffic) to the physical environment in the four neighbourhoods, as well as enhanced public awareness and engagement, and more buy-in among public officials.

The MUEC is now conducting training sessions for local public health officials to help them understand and evaluate the built environment in terms of obstacles and opportunities for active transportation. Apart from some small grants from Montreal's Public Health Agency, funding for the program comes primarily from Québec en forme, which is a province-wide program co-funded by the Chagnon Foundation and the Québec government that aims to reduce childhood obesity through more active lifestyles.⁵⁰ The MUEC is exporting the approach to other centres in Quebec and has applied for funding from the Canadian Public Health Agency to bring its model to Toronto and Calgary.

Interest in this topic is now very high in Montreal but changes to the built environment are modest because of a lack of municipal resources to implement the desired changes. Another constraint on the initiative is that the MUEC is not permitted by the conditions of its grant from Québec en forme, to engage in efforts to change provincial or federal policies that affect opportunities for active transportation. This type of work is crucial to advancing the agenda on this front and would be best carried out by a coalition of groups across Quebec and Canada committed to promoting active transportation.

In Montreal, the Green and Healthy Neighbourhoods program is a good example of how existing neighbourhoods can be retrofitted for active transportation through community-based planning and design.

⁵⁰ Québec en forme is unique in Canada: it is dispensing \$49 million per year for ten years to encourage active transportation, better nutrition, and a higher level of physical activity among youths. A part of the fund (\$1.5 million a year) targets the built environment.



In Toronto, a nonprofit group called Cities 8-80 is involved in redesigning neighbourhoods for active transport through community engagement.⁵¹ The group is working in eight communities across Ontario with funding from the Ministry of Health. Its program, called Active Places, Healthy People, involves educational presentations, workshops, and more prolonged community engagement processes in selected areas. The selected areas target underperforming public spaces (such as a park, plaza, or street) and the group works with the neighbourhood (including youth and children) and municipal officials for about six months to generate a plan that will revitalize the space and provide greater opportunities for an active lifestyle (e.g., improved facilities and activity programming in a park). So far, the municipalities involved have all issued RFPs for work to follow up on the group's recommendations. The group is producing a toolkit to allow other communities to undertake a similar process without the group's direct assistance. It hopes to do more outreach to youth, ethnic communities, and low-income people and to become more involved in policy advocacy (e.g., reducing speed limits to 30 km/hr in residential neighbourhoods throughout Toronto).

Another group that is active in Toronto is the Toronto Public Space Initiative, a small registered nonprofit. The organization does public policy advocacy for improvements in public space policy and programming, conducts research on community engagement in public spaces, and partners with other groups to sponsor specific public space improvement projects. For example, they are working with a number of community groups and a city councilor to create a peace garden in a residential neighbourhood in the west end of Toronto.

Also active in this area in Toronto is the Centre for City Ecology,⁵² which (with funding from Tides Canada) is conducting community design workshops with community representatives, architects, developers, and urban planners to raise awareness of the importance of good design in public spaces. The group also conducts the annual Jane's Walks in Toronto (funded by Metcalf Foundation and TD Bank) and helped give rise to the very successful magazine and blogsite, Spacing, which is focused on the design and function of public spaces in Toronto and other major cities across Canada.

In Calgary, a group called Great Public Spaces (GPS) is mobilizing neighbourhoods to participate in community consultations on revitalizing places along a new LRT corridor. The group undertook a six-month public consultation, including community walks along the LRT corridor and preliminary sketching of some revitalization options. The GPS partnered with a community association to open a store front office along the corridor and hire consultants to assist them with a more formal consultation process. The group conducted design workshops, charrettes, and other engagement activities

⁵¹ www.8-80cities.org

⁵² www.cityecology.net

around the design of the corridor. A final report was prepared and its recommendations are now being used by City departments as they proceed with the redesign. Funding for the project (\$150,000) came from the City of Calgary. GPS is an offshoot of Civic Camp and uses the Civic Camp website to communicate with its members and to network with its public constituency. The group hopes to be able to repeat this success in other parts of the city by providing technical assistance to other nonprofit groups undertaking redesign projects in public spaces, e.g., laneways, abandoned spaces, parks, and even public housing projects.

In Surrey (BC), the Better Environmentally Sound Transportation Association (BEST) leads the Living Streets project.⁵³ The project educates and trains community members (especially at-risk youth and recent immigrants) to conduct Community Street Audits. The audits ask residents living in suburban neighbourhoods to chart walking rights of way that would better connect them with daily destinations (such as public transit) and to provide their ideas on how to improve walking and biking safety. Volunteers share the results of the surveys at meetings attended by Surrey municipal planners, providing solution-oriented local input on low-cost changes to improve neighbourhood safety for non-car travel. The project receives funding from the Vancouver Foundation.

The Vancouver Public Space Network (VPSN) is a grassroots collective that engages in advocacy, outreach and education on public space issues in and around Vancouver.⁵⁴ This includes promoting creative, community-friendly urban design and fostering public dialogue and democratic debate on planning issues. VPSN is currently conducting a public consultation on making Broadway Avenue, Vancouver's most travelled east-west axis a "Great Street". The group is undertaking a series of workshops to explore ways to enhance the street, turning it from a thoroughfare into a destination. The group has also developed an evaluation tool that aims to assess a number of the squares and parks across the city. Since 2006, VPSN has grown to over 1,500 members.

Tactical urbanism

Another movement that is emerging on the Canadian urban scene is "tactical urbanism" (or "pop-up urbanism", "DIY urbanism", or "city repair"), which refers to grassroots, often unauthorized, interventions in public places to show that innovative solutions are available to improve the livability and sustainability of cities. The interventions are usually tailored to the specific place and are low cost, short term, and low risk with the possibility of high rewards. The actions involved may be seen as pilot projects that suggest permanent solutions or as political statements showing the limits of the possible. Another objective is to help build community cohesion, a sense of place, and

⁵³ best.bc.ca/living-streets

⁵⁴ vancouverpublicspace.ca



community self-sufficiency (as in “we have our own solutions to our own problems”). Organizing tactical interventions often depends on internet communication and social networking.

While much of the tactical urbanist activity is carried out in relatively unstructured fashion by groups with no lasting identity, some durable groups have emerged with continuous programming. For example, Vancouver Design Nerds is a member-based nonprofit that brings together urban planners, architects, urban designers, engineers, artists, and other interested people to undertake initiatives “to challenge the normative environment of the city.”⁵⁵ One initiative is the “car park”, whereby a car bound for the junkyard is reused as an urban planting box and placed in unused parking spots in public places or at major events. Gramorail is a set of two railway cars that have been redesigned as a huge gramophone and salon that could be paraded along unused rail corridors to draw attention to the city’s rich rail heritage and promote a sustainable mode of transportation. Projects are usually conceived at a Design Nerd Jam, a forum for members to discuss their projects and ideas and gather support for implementing them. Nerd Jams have themes such as Street Jam, to generate ideas for turning some of Vancouver’s streets into parkland. As an enterprising nonprofit, Vancouver Design Nerds will organize Nerd Jams as a service to other organizations. Toronto Design Nerds is modeled after the Vancouver group.⁵⁶

One specific type of tactical urbanism that is gaining in popularity is park(ing) days. This refers to the practice of temporarily converting metered on-street parking spaces into park-like public spaces as a way of drawing attention to the amount of space dedicated to cars in our cities. They are often featured within the context of other events or festivals (e.g., Car-Free Days) in cities across the country and sponsored by the nonprofits who organize these days. In Winnipeg, for example, a park(ing) day event has been organized since 2008 in the context of the Winnipeg Design Festival. Different groups have played lead roles over the years: Planner’s Network,⁵⁷ Architects Without Borders,⁵⁸ and Storefront Manitoba.⁵⁹

Bottom line

Efforts to improve the design of public spaces through nonprofit initiatives are relatively new in Canada and the practices involved are evolving. Compared to some other urban sustainability issue areas, such as energy, food, and greenspace, the number of nonprofit organizations leading initiatives in this field is limited and funders are just beginning to tune into the need for resources to support their work. Resources are needed for scaling up of projects

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⁵⁵ vancouver.designnerds.org

⁵⁶ torontodesignnerds.wikispaces.com

⁵⁷ www.mbeconetwork.org/component/k2/item/204-planners-network.

⁵⁸ www.awb-winnipeg.ca

⁵⁹ www.winnipegdesignfestival.net/?page_id=20

to other neighbourhoods and other communities and for lobbying provincial and municipal authorities to increase funding for implementation of the proposed designs.

Energy use and climate change

Linked to urban sprawl, car use and the design of public spaces is the issue of urban energy consumption and associated GHG emissions. Canadian cities are among the most energy intensive in the world and our urban areas are responsible for about half the country's GHG emissions, primarily from transportation, building heating/cooling, and industry. Historically, there has been little attention paid to the use of energy in urban areas or how to optimize it; building orientation and innovative building technologies to reduce energy use in Canada's building stock have been implemented in scattered developments but are largely ignored by mainstream builders, while fuel consumed for urban transportation has increased as gains from more efficient engine technology have been offset by the increasing number of vehicles, greater distances traveled, and increasing vehicle size. Energy used in cities is often generated from distant locations (entailing energy loss in the transport or transmission to cities) using non-renewable energy sources that have considerable environmental impacts.

Canadian cities are among the most energy intensive in the world and our urban areas are responsible for about half the country's GHG emissions,

The prospect of soaring fuel prices and the depletion of the world's oil supply, along with the daunting prospects associated with climate change, are forcing governments and other stakeholders to rethink the relationship between cities and energy use in Canada.

The federal government has set a national GHG emissions reduction target (of 20% below 2006 levels by 2020), which is helping to drive interest in urban energy issues, but federal action has been limited to modest gestures, including its home energy audit program (ended 2012), fuel efficiency standards for vehicles, research on innovative energy systems, grants for municipal energy efficiency projects from the Green Municipal Fund (through FCM), and its funding of some transit improvements. Provincial governments are more directly involved through their influence on building codes, transportation investments, electricity pricing, and responsibility for urban planning frameworks. The BC government has been particularly active in this respect; local governments there are now required to set greenhouse gas emission reduction targets, and undertake actions and policies for achieving those targets. The province has created an inventory of GHG emissions for each regional district in order to assist with implementation of this policy.

Municipalities are increasingly active in this issue as evidenced by methane recovery projects at municipal landfill sites (e.g., Toronto), experiments with biofuel bus engines (e.g., Montreal), and policies requiring civic buildings to be LEED certified (e.g., Edmonton, North Vancouver and Calgary). Other municipalities are working with utilities to set up district heating or cooling systems (e.g., in the City of North Vancouver, Toronto, Markham (ON),



Strathcona County (AB), Windsor, Calgary, London, and Charlottetown). Many municipal energy projects are being partially funded through FCM's Green Municipal Fund.⁶⁰ Community energy managers have been appointed by some municipalities (mostly in BC, where BC Hydro subsidizes the position, but also in some cities in Ontario, such as Guelph) to prepare and lead implementation of community-wide plans for reducing energy demand and switching to renewables. Over 200 municipalities in Canada have joined FCM's Partners for Climate Protection (PCP) Program,⁶¹ a five-step program that guides the municipality through planning and implementing GHG emission reduction plans. Planning efforts to reign in sprawl and promote active and public transit are also partially motivated by a desire to reduce energy use and emissions.

Industry associations (such as the Canadian Electricity Association, Canadian Gas Association, and Canadian GeoExchange Coalition) are increasingly engaged in community energy management due to the business opportunities associated with a shift towards a more energy efficient urban metabolism.

Research, networking and public education

National NGOs such as QUEST (see Box), the Pembina Institute, and Pollution Probe are involved in research, networking of professionals (industry, environmental groups, academia and government) and public education on this issue. Provincial-level groups do skills training, provide advice to other NGOs and municipalities, create guidebooks, conduct research and carry out advocacy for regulations and programs to support better community energy management. The Ontario Sustainable Energy Association,⁶² C3 (formerly Climate Change Central) in Alberta,⁶³ and the Community Energy Association in BC⁶⁴ are good examples. At the local level, there are several examples across the country of NGOs that are directly involved in building public awareness of and involvement in energy and climate change issues. For example, Bathurst Sustainable Development⁶⁵ conducts workshops on climate change at its Climate Change Action Centre while in Winnipeg, Climate Change Connection does similar work.⁶⁶ Academic institutes such as the Pacific Institute for Climate Solutions⁶⁷ (a collaboration among four research-intensive universities in BC) and the Ouranos Institute⁶⁸ in Quebec (a joint initiative by the Quebec government, Hydro-Québec and Environment Canada), support research on urban infrastructure, community adaptation and climate change mitigation strategies.

60 www.fcm.ca/home/programs/green-municipal-fund.htm

61 www.fcm.ca/home/programs/partners-for-climate-protection.htm

62 www.ontario-sea.org

63 www.climatechangecentral.com

64 www.communityenergy.bc.ca

65 www.bathurstsustainabledevelopment.com

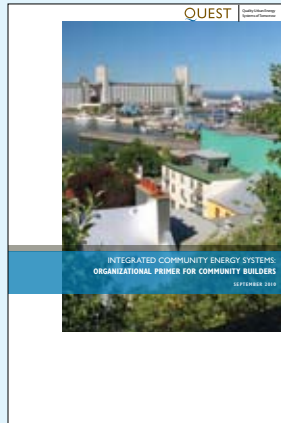
66 www.climatechangeconnection.org/Getconnected/Communityworkshops.htm

67 pics.uvic.ca

68 www.ouranos.ca

QUEST, Ottawa

QUEST (Quality Urban Energy Systems of Tomorrow)⁶⁹ is a loose consortium of private sector energy providers, former public policy experts, political and ENGO leaders that came together in the belief that the right conversations around climate change were not happening. Its mission is to foster integrated approaches to energy supply, distribution and use in cities that



will reduce related greenhouse gas and air pollutant emissions. QUEST's vision is that by 2050, every community in Canada will be operating as an integrated energy system. Its supporters include BC Hydro, the Canadian Centre for Energy Information, Canadian Gas Association, Canadian GeoExchange Coalition, Canada Green Buildings Council, Canadian Petroleum Products Institute, Canadian Urban Institute, Federation of Canadian Municipalities, Government of British Columbia, Natural Resources Canada, Ontario Power Authority, Pollution Probe, and Transport Canada. To date, QUEST has made significant progress in advancing public policy, addressing knowledge gaps, connecting decision-makers, and accelerating momentum at

the national and provincial levels through a variety of activities including workshops, networking and research. There are several regional caucuses in place across the country, i.e., in British Columbia, Ontario, and Nova Scotia, while emerging in Quebec, and New Brunswick. Each caucus has defined its own priorities.⁷⁰

Two interesting research initiatives are generating important tools that can be used in community energy planning, energy mapping and visualization. Spearheaded by the Canadian Urban Institute (CUI), community energy mapping uses GIS technology to map energy usage in buildings throughout the city and to assess buildings and blocks for their potential to accommodate renewable generation. The maps can reveal how land-use decisions affect the way energy is consumed in a community. It allows decision makers to evaluate existing energy use in a community and plan to improve energy efficiency through the use of different land-use and built form patterns, better building standards, transportation options and the integration of local alternative and renewable energy sources. The first community energy map in Canada was prepared by CUI for the City of Calgary in 2008. In 2009, CUI partnered with the Ontario Power Authority, Natural Resources Canada, and the Ontario Centres of Excellence to launch an initiative in which they applied this approach in Guelph, Hamilton, Barrie, and London. The project mapped out the effects of population and employment growth in the business-as-usual case, as well as evaluated how decisions about efficient land-use, transportation, buildings, and alternative energy technology measures could help meet

⁶⁹ www.questcanada.org

⁷⁰ www.crcresearch.org/community-research-connections/crc-case-studies/quest-quality-urban-energy-systems-tomorrow-integrat



energy and GHG emissions reduction goals. Subsequently, CUI released an Integrated Energy Mapping For Ontario Communities: Lessons Learned Report in 2011 that provides more detail on some of the steps in the approach.⁷¹ The initiative holds great potential to help communities achieve their goals related to energy, climate change, sustainability, and economic prosperity.

The Collaborative for Advanced Landscape Planning is a national, multi-disciplinary research group based at the University of BC that develops new tools to enhance public participation in community and landscape planning.⁷² Working with the Neptis Foundation, the group is developing a visualization tool that engages non-experts in learning about community energy. The tool enables the consequences of decisions related to the energy supply, distribution and use of energy to be visualized in terms of the land use impacts. The tool is being piloted based on data in two pilot BC municipalities, Richmond and Surrey. The visual information toolkit that will emerge from this project can be used in workshops, public meetings, and web media to reach the general public who might not otherwise be engaged in community decision-making. This initiative is funded in part by the Vancouver Foundation.

Building retrofits for energy efficiency

In many cities across Canada, NGOs are working with municipalities and utilities to promote residential energy retrofits. These programs provide building owners with access to a suite of features designed to address barriers to participation. They target high participation in focused geographic areas and employ community-based social marketing techniques to encourage participation. Program elements may include endorsement by local leaders, discounts on materials and labour, incentives from partners, simplified regulatory requirements, and local job creation and skill development.

For example, the BC Sustainable Energy Association's Retrofit BC program aims to stimulate retrofits in BC's Multi-Unit Residential Buildings (MURBs) (i.e. apartments, condominiums and housing co-ops).⁷³ The pilot program in Vancouver provides professional support, incentives and preferred-rate financing. The retrofits are paid for through savings on the building owner's utility bills. The program is supported by Vancity, the Vancity Community Foundation, the BC government, the City of Vancouver, as well as utilities FortisBC and BC Hydro. In Edmonton, the Greater Edmonton Alliance launched the Sustainable Works program, using its community organizing skills to build common interest among unions, businesses, community groups, government and utilities to help citizens retrofit and promote greener, cleaner buildings in the region.⁷⁴ Funding for this program is provided by the Alberta Ecotrust

71 canurb.org/sites/default/files/projects/2010/405_EngryMpng/IEMOC%20Lessons%20Learned%20-%20Nov%202011.pdf

72 www.calp.forestry.ubc.ca

73 www.bcsea.org/node/3090

74 greateredmontonalliance.com/?page_id=191

Foundation and the Catherine Donnelly Foundation. In Toronto, the Toronto Atmospheric Fund (TAF) operates a revolving loan fund to promote energy retrofits. It enters into agreements with building owners to cover up to 100% of the cost of the building retrofit. TAF collects a share of the resulting energy savings until it has recovered its capital and an investment return. After that, all savings flow to the building owner.⁷⁵

Some retrofit programs are specifically directed to the nonprofit sector. With support from the Donner Canadian Foundation, TAF is helping charitable organizations secure financing to retrofit their facilities, shielding them against rising energy costs so more of their scarce resources can be directed towards their missions. In Saskatchewan, Affinity Credit Union is working with the Saskatchewan Environment Society (an NGO) to provide loans to nonprofits to do energy retrofits of their buildings with repayment coming from the energy cost savings.⁷⁶

Federal (now discontinued) and provincial incentives for home energy audits formed the basis of many NGO programs to encourage home owners to undertake energy retrofits. In Ontario, for example, Green Communities Canada has offered home energy audits and advised homeowners on the most important retrofit steps to undertake. Similar programs are operated by NGOs in other provinces. In some cases, social enterprises have partnered with foundations and municipalities to have the retrofit work done by marginalized individuals (e.g., Embers Green Renovations in Vancouver⁷⁷).

Community energy planning

Community energy planning (CEP) uses the synergies between urban design and energy management to create livable communities with minimal energy use at the local level. A typical community energy plan sets a target for energy use (or CO₂ reduction) and identifies policy initiatives, programs, and investments that will achieve the goal over a certain amount of time. For example, Guelph's CEP sets a 2031 target of 7 tonnes of CO₂ per capita compared to the current 16 tonnes and lays out measures including land use planning (e.g., compact urban form), transportation planning (e.g., bike and pedestrian facilities), site design (e.g., solar orientation), energy supply (e.g., local renewables), and infrastructure (e.g., low energy street lamps). Guelph's CEP has become a model for other cities in Canada. Many CEPs have been created with the financial assistance of FCM's Green Municipal Fund.

CEP is largely carried out by municipalities in Canada, but a number of NGOs have created a variety of guides and toolkits on how to create a plan. These different approaches to creating a community energy planning include:

⁷⁵ www.towerwise.ca/espa

⁷⁶ www.environmentalsociety.ca/main/programs/energy-conservation-for-nonprofits

⁷⁷ embersvancouver.vcn.bc.ca/embers_green_renovations



- The Community Energy Association’s (CEA’s) (2006) *Toolkit for Community Energy Planning in British Columbia*⁷⁸
- The Arctic Energy Alliance’s (AEA’s) (2006) *Community Energy Planning Toolkit*;
- The Community Energy Association’s (CEA’s) and the Province of British Columbia’s (2006) *Community Energy & Emissions Planning: A Guide for B.C. Local Governments*.⁷⁹

In some cases, NGOs are assisting municipalities with the technical side of preparing a CEP. BC’s Community Energy Association,⁸⁰ the New Brunswick Climate Change Hub,⁸¹ and the Arctic Energy Alliance in Yellowknife⁸² are good examples.

Local renewable energy supply

Interest is growing in decentralized energy generation within cities from renewable sources, including solar panels on individual buildings, wind turbines, biomass, and geothermal energy. Private developers and municipalities are experimenting with new technologies such as heat recovery from sewers, which was pioneered in South East False Creek, Vancouver. Subsidies to help overcome financial barriers are usually provided by federal and provincial energy agencies, such as Natural Resources Canada (NRCan).

Renewable energy co-ops have sprung up across the country (e.g., Spark⁸³ in Alberta), but especially in Ontario, where such initiatives have been encouraged by the province’s Green Energy Act and generous feed-in tariffs. For example, the Exhibition Place Wind Turbine is a joint venture between the WindShare Co-operative and Toronto Hydro Energy Services. Electricity from the windmill, which is located on the Toronto waterfront, is sold to the Ontario Power Authority at a much higher rate than the Authority charges its customers for electric power (the so-called “feed-in tariff”).⁸⁴ Early funding for planning the project came from the Toronto Atmospheric Fund.

Another trend in local renewables is solar hot water heating. At least 15 pilot programs have been introduced by NGOs across the country. Most work to encourage home owners and institutional managers to install solar hot water panels through a combination of financial subsidies, low prices (through bulk buying), and social marketing. The most successful solar pilot program in Canada was launched by Solar BC⁸⁵ in 2008, a project of the BC Sustainable Energy Association. Financial support for the program comes from the Prov-

Renewable energy co-ops have sprung up across the country, but especially in Ontario, where such initiatives have been encouraged by the province’s Green Energy Act and generous feed-in tariffs.

78 www.communityenergy.bc.ca/sites/default/files/CEAtoolkit.Volume2.EnergyIdeas_0.pdf

79 www.env.gov.bc.ca/cas/pdfs/ccei_cea-planguide.pdf

80 www.communityenergy.bc.ca

81 www.nbhub.org

82 www.aea.nt.ca

83 www.sparkyourpower.ca

84 www.windshare.ca/about/test.html

85 www.solarbc.ca/about

ince of BC, Natural Resources Canada, Terasen Gas and FortisBC. The goal is to install solar hot water heaters on 100,000 homes by 2020. The group also targets schools, municipal buildings, social housing units, and aboriginal reserves. Nonprofits are also promoting solar hot water projects in Ontario where property owners can take advantage of the provincial feed-in tariff. For example, EcoPerth will facilitate the purchase and installation of PV systems from Canadian Solar with installation by a local electrical contractor.⁸⁶

Greenhouse gas reduction

The nonprofit sector is playing an increasing role in promoting greenhouse gas reductions through local actions and public education campaigns. An interesting example is the Regional Carbon Initiative launched by Sustainable Waterloo Region.⁸⁷ The program facilitates voluntary target-setting and reductions of GHG emissions in businesses and other organizations in the Waterloo Region. Member organizations are provided with a standardized online carbon accounting and reporting tool, technical workshops and networking sessions, access to Sustainable Waterloo Region's GHG Services directory, and public recognition for member achievements. The organization has created a detailed accounting and reporting methodology for members to follow. There are 14 (mostly large) businesses and institutions that have signed on to the initiative so far, and a further 33 that are preparing to join. Sustainable Waterloo Region receives financial assistance from the Kitchener Waterloo Community Foundation and the Trillium Foundation.

The New Brunswick Climate Change Hub was formed in 2001 with funding from the federal and provincial governments.⁸⁸ The Hub's goal is to increase awareness about the causes and consequences of climate change, and to assist communities in their efforts to reduce greenhouse gas emissions. The organization builds community capacity to address climate change through public engagement, stakeholder facilitation, and development of community-based action projects. The Hub provides networking, capacity building, facilitation, recognition, and technical support to communities, health and environment NGOs, and industry.

Transition towns

Transition Towns is an international grassroots network of communities that are working to build resilience in response to peak oil, climate change, and economic instability. Communities are encouraged to seek out methods to reduce energy usage and their reliance on long fossil fuel dependent supply chains for essential items, especially food. There are over 50 communities in Canada with Transition Town groups, mostly grassroots groups relying on

⁸⁶ ecoperth.lanarklocalflavour.ca/node/28

⁸⁷ www.sustainablewaterlooregion.ca/regional-carbon-initiative

⁸⁸ nbhub.org



volunteers. Groups sponsor speakers, food festivals, local currencies, workshops in economic localization (making communities more self-reliant), renewable energy, permaculture, and so on. Many of these groups are preparing Energy Descent Plans, which provide a vision for the future that will enable local government, businesses, community groups, and individuals to plan for a future without oil. It is an integrated, multidisciplinary plan for a post-carbon era. Transition Towns are located in communities across the country including Guelph,⁸⁹ Peterborough,⁹⁰ Kitchener-Waterloo,⁹¹ Halifax,⁹² Vancouver,⁹³ Quebec City,⁹⁴ and Victoria.⁹⁵

Bottom line

Municipalities are working in partnership with utilities, the provinces, local community groups, and urban advocacy organizations such as the Canadian Urban Institute in order to plan and implement programs that will reduce energy use and move towards greater use of renewables. Municipalities are also collaborating through the Federation of Canadian Municipalities and through provincial organizations such as the Association of Municipalities of Ontario, while working with the federal government through the Canadian Council of Ministers of the Environment. Progress has been especially strong on energy conservation initiatives in the residential sector and the introduction of new technology (e.g., in buildings, street lighting, etc.). However, achieving ambitious energy targets will require a broader range of programs than are currently in place. The switch to renewable supply, transportation and land use aspects of CEP especially needs more attention as achieving these objectives means confronting entrenched interests. As government funding for climate change research and action programs has declined recently, resources are at a premium and new funding sources need to be identified. Philanthropic dollars can in no way replace government funding that has been withdrawn and most funders shy away from offering such stopgap funding. However, funders can play a catalytic role in many areas, including piloting ahead-of the curve initiatives; convening key agents to mobilize collective impact efforts; and nurturing connections between nonprofit and municipal government efforts within individual communities.

Funders can play a catalytic role in many areas, including piloting ahead-of the curve initiatives; convening key agents to mobilize collective impact efforts; and nurturing connections between nonprofit and municipal government efforts within individual communities.

⁸⁹ transitionguelph.org

⁹⁰ transitiontownpeterborough.ca

⁹¹ www.transitionkw.ca/Blogs.html

⁹² transitionhalifax.chebucto.org

⁹³ www.villagevancouver.ca

⁹⁴ www.transitionquebeccentreville.org

⁹⁵ transitionvictoria.ning.com

Urban food supply and distribution

Closely linked to the issue of urban greening and sprawl, is the matter of food provision in the city. Historically, settlements in Canada tended to be located in prime agricultural areas and depended for food provision on their own hinterlands. Over time, the links between the city and its countryside have been largely sundered as cities have become distribution nodes on the global food production and supply network. Most food now travels hundreds or even thousands of kilometres from “farm to fork”, with obvious implications for energy use and GHG emissions.⁹⁶ To make these long trips, we have seen increases in the treatment of food with pesticides, the use of irradiation, and food processing methods that extend transport and shelf life but compromise nutritional quality. And of course, there is the ongoing issue of unequal access to nutritious food. In some cases, whole neighbourhoods are bereft of adequate amounts of fresh, healthy food – the so-called food deserts.

Food, as activists in this field are fond of saying, links to everything, including greenspace preservation around cities, the green economy, social justice, climate change mitigation, regional self-sufficiency, youth engagement and settling immigrants.

The burgeoning food movement is helping to address these issues by promoting access to locally-produced (meaning within the city itself or its immediate hinterland), nutritious (and sometimes organic) food. Those involved in the movement, including farmers, chefs, nonprofits and municipal governments have promoted the idea that we need to rethink and refashion the “food system”, which includes everything from how and where our food is produced, to its handling and transportation, processing, packaging, distribution, preparation, and disposal (or use) of food wastes. The overall message is that we need to be better informed about this system and how it affects us, and that the system needs to be more environmentally responsible and socially just. Food, as activists in this field are fond of saying, links to everything, including greenspace preservation around cities, the green economy, social justice, climate change mitigation, regional self-sufficiency, youth engagement, and settling immigrants, to name just a few.

Public interest in this topic has exploded over the last few years, presumably because of its links to personal health and nutrition, environmental concerns, and the gathering resistance to a homogenous globalized food culture.

Some provincial governments are undertaking programs to promote local food production by, for example, publicizing the location of farmers’ markets (e.g., Manitoba). In 2007, the Nova Scotia government passed an Environmental Goals and Sustainable Prosperity Act, which included environmentally responsible procurement practices and a commitment to local food procurement in public institutions. Most provincial governments also provide some support for buying within the province, in recognition of the economic benefits of keeping dollars circulating locally.

⁹⁶ All told, Canadians use about nine times more energy on food production and transportation than the energy they receive by ingesting the food. Mark Roseland, 2012. *Toward sustainable communities*, 4th edition. Gabriola Island: New Society Publishers.



Municipal governments are more directly involved; an FCM survey in 2007 showed that most local authorities were incorporating the need for public space to accommodate farmers' markets and community gardens into their planning documents. Some municipal governments have gone further by developing sustainable food strategies (e.g., District of North Saanich, Waterloo Region, Niagara Region, Ottawa, and Yellowknife) that aim to build community capacity for the local food economy (production, processing, distribution, retail).

Food policy advocacy

Food policy organizations are community or regional groups that aim to strengthen local food security by advancing sustainable food policies and programs. Usually holistic in nature, these organizations address a broad range of food-related issues that include: food security, health, nutrition and hunger relief, environmental sustainability, community economic development and waste reduction. They vary from informal volunteer groups, such as Peterborough's (ON) Food Policy Action Coalition, to more established nonprofits like Toronto's FoodShare,⁹⁷ although advocacy is only one component of FoodShare's work. Food Matters Manitoba is an example of a strong provincial organization which works for a just and sustainable food system based on the principles outlined in the Manitoba Food Charter.⁹⁸ In total, there are more than 100 food policy advocacy groups in Canada, with at least one in every province.

At the national level, Food Secure Canada (FSC) is a new umbrella group that is helping to facilitate collaboration on food policy issues across the country.⁹⁹ It brings together national, provincial and local organizations to identify issues of national importance, provides training and support to its members, and helps pool resources to mount more effective campaigns. FSC received funding from the McConnell Foundation to support convening and development of its learning networks, notably the Local and Sustainable Food Systems network.

In some cases, these organizations have a formal liaison with city councils, in which case they are known as food policy councils. The councils are made up of expert volunteers and stakeholders from food-related sectors and often have a staff person paid by the city. They advise local government on food issues, recommend policies, and set goals and strategies for achieving them. Many councils develop community food charters or strategies that serve as blueprints for sustainable food systems. The Toronto Food Policy Council¹⁰⁰

97 www.foodshare.net/index.htm

98 www.foodmattersmanitoba.ca/sites/default/files/Final%20English%20Manitoba%20Food%20Charter.pdf

99 foodsecurecanada.org

100 www.toronto.ca/health/tfpc

was the first such council in Canada and is still considered to be one of the most active and effective (see Box). Other Canadian cities that have some version of a food policy council include Vancouver,¹⁰¹ Calgary,¹⁰² and Montreal.¹⁰³ Other cities, such as Edmonton, are considering it. Seed funding would be helpful to assist smaller municipalities to set up such councils or to assist in the preparation of food charters.

Food policy advocacy organizations, because they take a holistic view, often have a strong social mission; they see the role that food can play in building communities and reaching marginalized groups. The Toronto Food Policy Council, for example, worked with several nonprofits (FoodShare, The Stop and Second Harvest¹⁰⁴) to launch a social animation program directed at the most marginalized neighbourhoods in the city. With funding from the City of Toronto and the Toronto Community Foundation,¹⁰⁵ the Council hired four animators who mobilized these communities to apply for city funding to set up community gardens, community kitchens and farmers' markets. FoodShare now operates the program with one animator, funded with grants from Toronto's Community and Social Services department and Toronto Community Housing.¹⁰⁶

The Toronto Food Policy Council

The Toronto Food Policy Council (TFPC) is a citizen body of diverse people from the food, farming and community sectors which are responsible for generating food policy for the City of Toronto. Formed in 1991, the 30-member TFPC supports scores of programs with the



shared goal of ensuring equitable access to food, nutrition, community development and environmental health, acting as professional lobbyist for the people on food and related issues. The council operates as a sub-committee of the Toronto Board of Health and has a full-time coordinator. This arrangement has gained interest from public health, community, food security and sustainable agriculture organizations around the world and the Council has received many awards for putting food security on the public agenda in Toronto. For instance, working to ensure all significant decisions and expenditures are viewed through a "food lens," the Council succeeded in having food issues highlighted in the City of Toronto's official

plan, adopted by city council in 2002 and updated in 2007. It also championed the Toronto Food Charter, a declaration of citizen rights and government responsibilities that sets the food security standard for municipalities, and has been responsible for launching many food security programs in the City of Toronto, often in combination with businesses or community organizations such as FoodShare and The Stop.

101 www.vancouverfoodpolicycouncil.ca

102 calgaryfoodpolicy.blogspot.ca

103 credemontreal.qc.ca/a-propos-de-la-cre/comites/nourrir-montreal

104 secondharvest.ca

105 www.tcf.ca

106 www.foodshare.net/animators01.htm



Community gardens and community kitchens

The conventional way to address urban hunger has been to supply lower-income households with food from food banks. While such services remain necessary, many nonprofits (including food banks themselves) in Canada are focusing on more engaging opportunities for their clientele that allow them to become more involved in the local food system, learn food production and preparation skills, and build community. Two key strategies are community garden programs and community kitchens.

A community garden is a piece of land managed collectively by a group of people and either gardened collectively or on individual plots. Community gardens provide fresh produce and plants as well as satisfying labour, neighborhood improvement, a sense of community and connection to the environment. They are typically located in public parks or other city-owned land, on rooftops, outside senior citizens' residences, on school board properties, church properties, or on abandoned or idle private lots. Municipal governments are often directly involved in setting up community gardens. Toronto, for example, has a City Community Gardening Coordinator who helps groups obtain approval for gardens on city-owned lands.¹⁰⁷ However, nonprofits play an important role in creating or facilitating the creation of community gardens by providing support to groups which want to set up a garden, including site identification, educational programs, and help with obtaining grants for supplies and tools from outside funders. In Toronto, FoodShare¹⁰⁸ and Evergreen¹⁰⁹ serve this function, while the Toronto Community Garden Network¹¹⁰ organizes events (such as conferences and potluck dinners) and publishes an e-bulletin. In Vancouver, the Environmental Youth Alliance operates four community gardens and associated educational programs, using mostly volunteer labour.¹¹¹ The Vancouver Urban Agriculture Network works to secure city support for community gardens in that city, provides a support network for community gardeners and urban food growers in the city, shares info on resources and educational opportunities, and supports the creation of new community gardens.¹¹²

A community kitchen brings together members of the target group (e.g. youth, new immigrants, pregnant women) to create healthy, simple meals. The goal is to teach cooking techniques and to create a relaxed environment where social connections can be made. There are literally hundreds of community kitchens in cities throughout the country. When this movement started in the 1990s, many community kitchens were set up informally by a few individuals with little outside support. Since then, NGOs that specialize in support-

107 www.toronto.ca/parks/engagement/community-gardens/index.htm

108 www.foodshare.net/garden02.htm

109 www.evergreen.ca/en/programs/communities/community-development/food-gardens-toronto.sn

110 www.tcgn.ca/wiki/wiki.php

111 www.eya.ca/eya-gardens.html

112 vuan.blogspot.ca/2009/05/about-us.html

ing community kitchen initiatives have emerged. One interesting group is Fresh Choice Kitchens in Vancouver.¹¹³ This started in 1996 (with funding from Vancouver Coastal Health Authority and some corporate support) and eventually set up over 25 community kitchens in Vancouver before it evolved into a province-wide community kitchen hub. Its goals include promoting the idea of community kitchens, helping groups to set them up, providing leadership training and serving as a centre for information exchange. Funding now comes exclusively from the Vancouver Food Bank. Other examples include CHEP Good Food Inc. in Saskatoon, which, among other initiatives, is involved in developing leaders for collective kitchens.¹¹⁴

Food hubs and community food centres

Urban food centres are gradually emerging across the country as the local food movement matures. These centres vary widely in their mission and provenance, but all bring together a wide variety of services and activities related to the food movement, creating synergies and helping to push the movement to a new level of integration.

A “food hub” is defined by the U.S. Department of Agriculture, which has produced a guide to food hubs in the U.S., as a business or organization that connects producers with buyers by offering a suite of production, distribution and marketing services.¹¹⁵

One such food hub is currently being planned and created in Vancouver by Local Food First, a nonprofit organization formed in 2006 with the express goal of creating a permanent, physical hub for local food in the city. Called New City Market, the development will aim to serve three main functions for Vancouver’s burgeoning local food scene. One, as a processing facility with certified kitchens for canning and other value-added food preparation; two, as a permanent market space where farmers can store and sell produce wholesale or retail; and three, as an aggregator of services such as education, community outreach and marketing. With a \$100,000 grant from Vancity credit union, Local Food First completed a business plan for the market and The Real Estate Foundation of BC has also provided a \$30,000 grant for site development.

A “community food centre” is a common space where people come together to grow, cook, share, learn about and advocate for good food. Centres help low-income community members access food, provide training to improve food preparation skills, enhance understanding of the food system, create new opportunities for effective action on systemic issues, and connect people to each other and other community services.

113 www.communitykitchens.ca

114 chep.org/index.html

115 www.usda.gov/wps/portal/usda/usdahome?contentid=2012/04/0127.xml



A good example is The Stop Community Food Center in Toronto, which has evolved from a food bank 30 years ago into a hub of community action and programming around poverty, health and agriculture. Today, The Stop hosts a wide variety of both community development and community food security programs, including community gardens and community kitchens. In 2009, with assistance from the Metcalf Foundations and other funders, The Stop opened a new headquarters (the “Green Barn”) that includes a weekly farmers’ market, after school and summer camp programs for underprivileged youth, a sustainable foods program for Grade Five students, cooking and gardening programs for marginalized individuals, sheltered gardens which are used for growing culturally appropriate food, and more. It is also a leading example of urban agriculture, housed within a LEED Gold certified building.

Santropol Roulant began as a meals-on-wheels program serving isolated individuals across Montreal. Similar to The Stop, Santropol Roulant has become a community food centre, addressing a host of food-related activities, and involving a diverse array of individuals. The Roulant’s programming has expanded over the years to include nutrition workshops, urban agriculture projects, composting initiatives and more. The organization recently moved to a larger facility that has allowed the organization to further expand its operations and programming. The new facility lends itself to increased food literacy workshops and an expanded urban agriculture program, with a terraced container garden, year-round greenhouse and rooftop garden. The organization has recently partnered with a farm on the Island of Montreal, which will increase the amount of local food for their meals

In the Downtown East-side area of Vancouver, a low-income area with many marginalized people who have inadequate access to healthy, affordable food, The Kitchen Tables project is working with multiple stakeholders to create systemic change.¹¹⁶ It aims to replace an unsustainable, charity-based system with a holistic community economic development system by building a sustainable food procurement, processing and distribution system for local residents. The Vancouver Foundation, Vancity Community Foundation, the City of Vancouver and the Vancouver Coastal Health Authority have contributed to the development of this project.

Food recovery

One way of reducing food waste while meeting the food needs of marginalized groups is to recover food before it becomes waste. Most cities in Canada now have NGOs that specialize in picking up excess food from restaurants, hotels, caterers, grocery retailers, food manufacturers, and food terminals for

The Kitchen Tables project aims to replace an unsustainable, charity-based system with a holistic community economic development system by building a sustainable food procurement, processing and distribution system for local residents.

¹¹⁶ dteskitchentables.org/about-the-project

The LifeCycles Fruit Tree Project uses hundreds of volunteers to harvest fruit from privately owned trees. This is fruit that would otherwise go to waste and the bounty is then shared among homeowners, volunteers, food banks, and community organizations.

distribution to community kitchens and food banks. One of the longest running initiatives of this type is Second Harvest, a charitable nonprofit created in 1985 by two women who wanted to reduce food waste and feed Toronto's hungry. Since then, the organization has rescued and delivered more than 30 million kilos of food to over 200 community organizations and prevented over 15 million kilos of greenhouse gas equivalents from entering the atmosphere.¹¹⁷ Montreal-based La Tablée des Chefs is another such example.¹¹⁸ Founded by a gourmet chef, La Tablée's food recovery program takes leftover food from functions at hotels and donates them for use in local food banks. Last year, La Tablée was able to recover over 150,000 meals that otherwise would have gone to waste. In Vancouver, Quest Outreach Society's Food Exchange program intercepts, processes and then redistributes donated surplus food from food retailers and farmers to social service agencies in the region.¹¹⁹ From these donations, Quest feeds over 60,000 people a month with a team of 11 employees and a network of 2,000 volunteers, many of whom are from the low-income Downtown Eastside community. As a result of these activities, 40 tonnes of food are diverted from the landfill daily.

Another model is provided by the Armstrong Food Exchange (a town north of Vernon BC), which collects surplus food from private gardens and farms for delivery to seniors' facilities, food banks and community kitchens. In eight weeks, the program gathered almost 3,000 kgs of food for distribution. Initiatives in other cities aim to recover fruit and vegetables from private yards and gardens. For example, the LifeCycles Fruit Tree Project¹²⁰ in Victoria (BC) uses hundreds of volunteers to harvest apples, cherries, pears, and other fruit from privately owned trees. This is fruit that would otherwise go to waste and the bounty is then shared among homeowners, volunteers, food banks, and community organizations within Victoria. A portion of the harvest is set aside to make value-added products (like jams) that help defray project costs. In 2011, the organization collected and redistributed over 16,000 kilograms of fruit. The Vancouver Fruit Tree project, Calgary Harvest,¹²¹ Fruit Share Manitoba,¹²² and Toronto's Not Far From the Tree play a similar role in these other Canadian cities.¹²³ Most of these programs rely heavily on volunteer labour.

A slightly different approach is represented by community programs that "recover" idle yards by matching households with yards that don't want to garden with those who would like to garden but don't have yards. An example of this type of initiative is offered by Yes in my Back Yard, a program of The Stop in Toronto, which sets up garden sharing matches in areas around its

117 secondharvest.ca

118 www.tableedeschefs.org/en/initiatives/sustainable-food-broker

119 questoutreach.org

120 lifecyclesproject.ca/initiatives/fruit_tree

121 calgaryharvest.com

122 www.fruitshare.ca

123 www.notfarfromthetree.org



two locations. It also offers a tool lending library, free gardening workshops to enhance gardening skills, some free seedlings, a community seed exchange, and opportunities to meet and learn from other gardeners.¹²⁴

Local food sourcing

Local food sourcing is a way that institutions (such as universities, hospitals, schools, and daycares) can contribute to strengthening the regional food economy and reducing the environmental impacts associated with food transport. The Canadian Organic Growers' program, Growing Up Organic, currently has four pilot projects that introduce local and organic food into institutions. The pilot projects are located in BC's Salt Spring Island, Winnipeg, Ottawa and the Perth-Waterloo-Wellington region of Ontario. In Winnipeg, the program has approximately 18 daycare centres participating. Salt Spring Island has 32 farmers partnered with 2 local daycare centres.

Équiterre,¹²⁵ a nonprofit organization in Quebec, plays a critical role in institutional procurement projects focused on introducing local and organic food into institutions throughout that province. Équiterre started with a pilot project that ran from 2002 to 2005, with a total of 44 daycare centres. Many of the institutions continued to source local food when the pilot project expired. In 2007, the program started again under the name, Á La Soupe and currently operates with 22 institutions including a hospital, elder care institutions, high schools, elementary schools, as well as many daycare centres.¹²⁶ With support from Québec en forme, Équiterre is carrying out an examination of the obstacle to and opportunities to “short circuit” the food system in Quebec, i.e., to establish more links between local producers and local consumers (institutional and household).¹²⁷

Farm to Cafeteria is an emerging network that promotes, supports and connects farmers with cafeterias in schools, universities and hospitals with the goal of increasing access to local, sustainably grown foods. The organization's specific objectives include closing the distance between the farm and the cafeteria tray and increasing the consumption of local foods within public agencies.¹²⁸ The Canadian Coalition for Green Health Care also emphasizes the importance of local food sourcing for health care institutions.¹²⁹ My Sustainable Canada, based in Kitchener (ON), works on a suite of sustainable consumption issues, including ways to encourage local food procurement.¹³⁰ And the Greenbelt Fund, which is a partnership with the Ontario Ministry of Agriculture, Food, and Rural Affairs, works to increase local and sustainable food purchases by the public sector. Initiatives include ontariofresh.ca which

¹²⁴ thestop.org/yes-in-my-back-yard

¹²⁵ www.equiterre.org

¹²⁶ www.equiterre.org/projet/a-la-soupe

¹²⁷ www.equiterre.org/projet/nos-recherches/mangez-frais-mangez-pres

¹²⁸ www.farmtocafeteriacanada.ca

¹²⁹ www.greenhealthcare.ca

¹³⁰ www.mysustainablecanada.org

is an electronic networking and marketing tool where food service buyers can source a diverse range of local food products.¹³¹

Local Food Plus¹³² (LFP) is a nonprofit organization that fosters sustainable local food systems in Ontario by certifying producers and processors and linking them to local food retail establishments. LFP has developed procurement policies that have encouraged institutions like the University of Toronto and the municipality of Markham to source sustainably grown food from regional producers. With LFP's help, Toronto City Council also approved a local food procurement policy that began with a pilot project in 37 city daycare centres with hopes of expanding to nursing homes and homeless shelters. The City also set 50% as the target for the amount of locally grown and produced food to be served through city programs. The organization began in 2005 (with support from the Metcalf Foundation) in Ontario and is developing programs in three other Canadian provinces with support from the McConnell Foundation.

Farm Folk/City Folk¹³³ has a number of projects that bring together producers and consumers to cultivate a local food system in BC. For its Get Local program,¹³⁴ the organization (in partnership with Local Food First¹³⁵) works with food producers and food buyers to increase business relationships and address some of the food supply and distribution issues that prevent local sourcing. The program also involves public education in order to increase consumer demand for BC food products and provide BC producers with a solid market to increase production.

Community supported agriculture

Many urban dwellers are benefiting from community supported agriculture (CSA), which brings together growers and consumers as integral parts of the local food system. Typically, local farmers on the urban fringe grow food for a group of city-resident subscribers, who agree to buy it before the growing season begins and receive a weekly food basket throughout the growing season. This arrangement reduces financial risk for local family farmers, supports the local farm economy, engenders more self-reliant communities, and helps people connect with the food they consume.

There is no umbrella organization of CSA farms in Canada but Ontario alone has over 200 participating farms (according to the Ontario CSA Directory) and there are over 100 in Quebec. Nonprofit groups are sometimes involved in setting up CSAs. In Quebec, the CSA movement was spearheaded by Équiterre. Since its inception in 1993, Équiterre has been successful in promoting ecological agriculture, fair trade, energy efficiency, and sustain-

131 ontariofresh.ca/about-greenbelt-fund

132 www.localfoodplus.ca

133 www.farmfolkcityfolk.ca

134 www.getlocalbc.org

135 twitter.com/localfoodfirst



able transportation in Quebec. The organization has helped launch over 100 CSAs in Montreal and elsewhere in Quebec. The group estimates that 7,500 contracts for weekly food baskets were made in 2005, which provided at least 20,000 people with local organic food throughout the season. Equiterre's CSA work has received support from numerous foundations over the years, including EJLB, the Montreal Community Foundation and the LES Foundation.

Food and education

For an urban food system to flourish, city residents need to be engaged: They need to understand the food system, be informed of the consequences of their food choices, and perhaps have the skills to be directly involved in food production. Not surprisingly, a lot of the new energy related to the urban food movement is going into educating the public and, in particular, young people.

Urban farms provide an excellent opportunity for urbanites to have hands-on experience with food production. The Black Creek Community Farm (BCCF) is a three hectare site located in Toronto. The farm is situated between a major urban centre (Jane & Finch) and a major university (York). The project is being led by Everdale¹³⁶ (a farm-based charity that does farmer training and youth education) in partnership with charitable groups Food-Share¹³⁷ and Afri-Can Food Basket,¹³⁸ along with Fresh City Farms,¹³⁹ a local social enterprise in the food business. Eventually, the farm will host a range of educational programs for young people and provide training for a new generation of urban farmers. All of the food will be sold to local vendors and at farmer's markets and a community garden will be open to the public. The farm is supported by a number of other key organizations: York University's Faculty of Environmental Studies, Ryerson University's Centre for Studies in Food Security, and the World Crops Project. The land is being leased from the Toronto and Region Conservation Authority.

There are many other farms or gardens run by nonprofit organizations with an educational purpose in or near cities across Canada. Earthwise Society in Delta (BC) is an example of a grassroots community-based organization providing educational programs for children related to growing food. Students visit the 1.2 hectare Earthwise Farm, which is located at the urban/rural edge, to learn about seeds, soils, ecosystems and organic food production. The organization runs an apprentice program to train young urban farmers. In Invermere (BC), a high school donated adjacent land to a nonprofit group called Groundswell to create a 300 square metre, solar-heated, community greenhouse.¹⁴⁰ The greenhouse is used for urban agriculture courses at the nearby College of the Rockies. The greenhouse was built with volunteer la-

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¹³⁶ everdale.org/blackcreek/blackcreek-project

¹³⁷ www.foodshare.net/index.htm

¹³⁸ blog.africanfoodbasket.com

¹³⁹ www.freshcityfarms.com

Ecosource's Growing for our Good program builds volunteers' skills in organic and sustainable urban food production through free, hands-on workshops in a Teaching Garden while growing food for the Eden Community Food Bank.

bour and the financial support of the Columbia Basin Trust. In Vancouver, Fresh Roots¹⁴¹ partners with a school board to set up urban farms on school properties. Farmers sell the produce to supplement their income while the schools get learning opportunities for students and part of the harvest for their cafeterias. The Vancouver Foundation supported this initiative through a grant to the school board for a study on the feasibility of such a project.

Some programs target adults as well as youth. For example, Toronto Green Community launched Greening Toronto's Gardens in 2004.¹⁴² It includes garden workshops for adults and the Great Garden Adventure, a program to teach children about garden ecosystems, composting and growing food. TGC runs the program at locations throughout Toronto. In Mississauga, Ecosource's Growing for our Good program builds volunteers' skills in organic and sustainable urban food production through free, hands-on workshops in a Teaching Garden while growing food for the Eden Community Food Bank.¹⁴³

Many other nonprofits are working with school boards and individual schools to introduce local food awareness into the educational curriculum and cafeteria offerings. In Quebec, a group called Jeunes pousse ("young seedlings") helps schools and daycares create teaching gardens and provides programming on food and gardening.¹⁴⁴ Each year, the program reaches another 2,000 students. The organization also trains teachers on how to integrate urban gardening and food into their curriculum. This is a province-wide program that has been running for ten years with funding from Québec en forme, an organization that is co-funded by the Quebec government and the Chagnon Foundation. In Vancouver, the Environmental Youth Alliance runs a similar program called Growing Kids with support from the Vancouver Foundation, TD Friends of the Environment Foundation, the BC Real Estate Foundation and Vancity, among others.¹⁴⁵

Social enterprise

The food security/local food movement has grown dramatically over the last few years, with much of the interest coming from people who have built social enterprises in the field. Here are a few examples:

- **Urban CSAs:** CSAs usually involve food produced on the urban fringe. In some cases, however, the "farms" are located within the city, in unused gardens or yard space. In Edmonton, for example, On Borrowed Ground¹⁴⁶ grows food in ten private gardens and has dozens of members

140 groundswellnetwork.ca/index.php?page=Greenhouse

141 www.freshroots.ca

142 torontogreen.ca/index.php/programs-mainmenu-121/green-spaces-mainmenu-70/green-garden.html

143 www.ecosource.ca/msura.htm

144 www.jeunespousses.ca

145 www.eya.ca/school-gardens.html

146 www.onborrowedground.com/members.html



who purchase weekly baskets or work in the gardens. City Farm Boy¹⁴⁷ in Vancouver uses a similar model, growing food on front and back lawns. Vegetable Patch in Ottawa partners with homeowners to gain access to growing space in people's backyards. A portion of the vegetables grown go back to the owner, and a portion gets sold through a CSA program. In Toronto, an enterprise called Young Urban Farmers is entering its third season with a similar model. Toronto-based FoodCycles is similarly using greenhouse and outdoor growing space in Downsview Park to run a 20-share urban-grown CSA.

- **Farmers' markets:** Farmers' markets are springing up in cities across the country, often facilitated by municipalities who designate area for this purpose. In some cases, nonprofits are organizing markets and combining them with food programming. A good example of this is the Evergreen Brickworks Farmers' Market in Toronto,¹⁴⁸ which promotes organic food, local suppliers, and cottage industries, while offering educational opportunities on healthy food preparation.
- **Mini farmers' markets:** Some community groups are setting up temporary "pocket markets" that supply fresh produce from local farmers. The markets may be set up in office buildings, hospitals, senior's centres, or churches. Such groups include FoodRoots¹⁴⁹ in Victoria (BC) and Farm to Family¹⁵⁰ in Richmond (BC). In Montreal, Fruixi (with support from Québec en forme) has six trike carts with which to sell local produce at events and in city parks.¹⁵¹
- **Compost pickup:** Food scraps make up about 40% of the mass of the waste stream in Canada but few cities have comprehensive collection programs. Social enterprises are moving into this space by offering pick up services in cities across the country. Scraps are usually composted in commercial facilities and turned into soil amendments. In Vancouver, Recycling Alternatives picks up organics from businesses and residents can drop off their scraps at Vancouver's farmers' markets for pick up by the company.¹⁵² Compost Montreal has over 1000 residential customers and picks up from restaurants and other businesses.¹⁵³
- **Food boxes:** In Toronto, FoodShare's Good Food Box program distributes 4,000 boxes of fresh and mostly local produce a month through 180 neighbourhood drop-offs.¹⁵⁴ Boxes are sold at cost. Staff time and capital costs are subsidized by foundation and government grants while much of

147 www.cityfarmboy.com

148 ebw.evergreen.ca/farmers-market

149 www.foodroots.ca

150 www.facebook.com/Farm2Family

151 www.marchefrontenac.com/node/2/a-propos

152 www.recyclingalternative.com/where-does-it-all-go/organics

153 www.compostmontreal.com

154 www.foodshare.net/goodfoodbox01.htm

the labour involved is volunteer-based. There are now dozens of programs across Canada modeled on FoodShare's Good Food Box.

- **Regional value chain:** The Vancouver Island Heritage Foodservice Co-operative¹⁵⁵ is a multi-stakeholder co-operative that was launched in 2008 with the purpose of mobilizing partners to rebuild local food systems on Vancouver Island. The business plan includes distribution, warehousing, and co-packing services. The multi-stakeholder co-operative has brought together nonprofit organizations concerned with health, food security, community economic development and climate change with farmers, alternative distributors, workers and co-packing kitchens as members. The co-operative has 40 members, most of them organizations. Funder involvement with respect to regional value chains includes the McConnell Foundation's Regional Value Chain Program. Launched in 2011, the program has a focus on strengthening the ability of regional producers, processors, distributors, food service providers and retailers to make healthy, sustainably produced food accessible to all Canadians, by whatever means appropriate in individual communities. The Value Chain Program provides resources and funding (with small grants of up to \$15,000) focused on assessment of regional food systems, business planning, and learning for projects working to structure regional food markets around values of sustainability, inclusion and health.¹⁵⁶

Bottom Line

In the last few years, interest in the food movement has soared to new heights, with thousands of Canadians involved in one way or another in food production (or recovery) and distribution. While the movement has matured, with a wide range of programs now being offered, the emergence of food hubs in larger centers across the country, and hundreds of social enterprises, many observers are of the opinion that the vast potential of this movement is just beginning to be tapped. One of the barriers that thwart progress on this issue is the fact that much of the work involved is being done by volunteers, underpaid and overworked staff, and by small groups working in isolation. More resources are needed to stabilize existing nonprofit groups and the scaling up of successful projects needs more attention from governments and foundations. Moreover, there is a need for greater effort in the policy domain in order to persuade governments at all levels to adopt plans, regulations, and programs that will boost local food production and distribution, and enhance food security for disadvantaged groups.

¹⁵⁵ www.bcca.coop/node/220

¹⁵⁶ www.mcconnellfoundation.ca/en/programs/sustainable-food-systems



Greenspace

About 90% of urbanization in Canada takes place in the form of “greenfield” development on the urban fringe, which entails the conversion of natural (or agricultural) areas into urban space. Through this process, what was once continuous forest cover in many regions has been reduced to small pockets of treed areas while most wetlands have disappeared (e.g., only 30% of wetlands across the Canadian prairies and in southern Ontario remain).

In a typical Canadian city, about two-thirds of urbanized space is covered by asphalt and buildings, while the remaining third remains green in the form of parks, lawns and gardens. However, residual green spaces are only nominally green if they are composed of manicured and monocultured grasses, exotic shrubs and trees, or are heavily dosed with pesticides. Although a city may have hundreds or thousands of street trees, they are often under severe stress from poor growing conditions and inadequate maintenance; not surprisingly, survival rates are often low. Moreover, green areas are not equally distributed throughout our cities: Many lower-income neighbourhoods are especially deprived of parks and gardens.

As a result, natural habitat for other species is severely limited in most urban areas in Canada and stories about the regional extirpation of once-familiar species (including mammals, amphibians, reptiles and birds) are now common in urban areas across the country. Ecological processes that depend on healthy continuous tracts of vegetation are also unraveling. For example, urban rivers and lakes are experiencing shoreline erosion from flooding and high pollutant loads, both of which are related to the penury of vegetated land in the urban watershed.

Enhancing green spaces in our cities has multiple benefits. Vegetation absorbs air pollutants and greenhouse gases, provides habitat, reduces runoff into storm sewers and erosion along streams during heavy rains, helps reduce energy use for heating and cooling of buildings, improves urban aesthetics, and mitigates the urban heat island effect. Recent research has also shown that humans have healthier lives and suffer from fewer mental health problems when they live near or otherwise have regular contact with nature. The importance of greenspace in ensuring the proper physical and mental development of children is also becoming more apparent.

Communities across Canada are waking up to the need to integrate healthy, natural greenspace into the urban fabric. Land use plans are increasingly adopting policies to encourage a green network, with patches of green connected through natural corridors on a community- or region-wide scale. A few cities, notably Edmonton, have created biodiversity strategies that rely on the preservation and expansion of green spaces. Campaigns to ban the use of cosmetic pesticides used on lawns and in parks began at the community level and have resulted in province-wide bans in Quebec, Ontario, Nova Scotia, PEI, New Brunswick, and possibly soon in Manitoba and BC. Many

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Greenspace is usually undervalued in public and private decision making because its many functions are unappreciated by the wider public. . . This important gap in our awareness is being addressed through a new interest in quantifying the benefits of green spaces by translating the services they provide into dollar amounts.

communities have adopted tree protection bylaws (e.g., Kingston, St. John's, Montreal) and some have implemented wider urban forest strategies with a forest inventory, maintenance, protection and replacement provisions (such as Regina, Prince George, Regina). Municipal parks departments are responding to changing values by reintroducing native trees and shrubs to city parks and streets.

Research and policy

A number of nonprofits are directly involved in research on green spaces, usually with a policy focus. Evergreen, for example, has a vigorous research agenda, especially related to school grounds. Much of its research focuses on the value of vegetated school grounds to stimulate physical activity and connection to nature. Its policy work also relates to this topic.¹⁵⁷ Other Evergreen research has focused on the acquisition and stewardship of greenspace in urban areas and the related policy issues.

Greenspace is usually undervalued in public and private decision making in part because its many functions are unappreciated by the wider public. The role of green spaces in cleaning the air and water, providing habitat, preventing erosion, and mitigating greenhouse gas emissions is rarely considered when decisions have to be made about destroying such spaces or investing in them. This important gap in our awareness is being addressed somewhat through a new interest in quantifying the benefits of green spaces by translating the services they provide into dollar amounts. In Canada, the David Suzuki Foundation has taken the lead in this field with a number of reports on the value of green spaces in periurban areas, including BC's Lower Mainland, and in Ontario the Lake Simcoe Basin and the Greater Golden Horseshoe Greenbelt.¹⁵⁸ This research is often done with financial support from foundations. For example, the latter was co-funded by the Friends of the Greenbelt Foundation.

Greenbelts

A greenbelt is a large, usually continuous, area of agricultural or natural landscape just outside a major city that is protected from development by government policy or ownership. Greenbelts can serve many purposes but often the aim is to stem urban sprawl, preserve foodlands and recreational opportunities near the city, and stabilize the local farm economy. The oldest greenbelt in Canada is the one in Ottawa, which was set up through federal expropriation of farmland in the 1950s and is now managed by the National Capital Commission.¹⁵⁹ The greenbelt forms a continuous arc of greenspace within the City of Ottawa. The Vancouver region has an extensive Green Zone that

¹⁵⁷ www.evergreen.ca/en/resources/schools/research-policy.sn

¹⁵⁸ www.davidsuzuki.org/search/?b=Publications&q=value&x=0&y=0

¹⁵⁹ www.canadascapital.gc.ca



was designated in the 1996 regional plan. It includes some farmland that is protected by provincial legislation (the Agricultural Land Reserve) and other lands that are municipally zoned to restrict development.¹⁶⁰

More recently, nonprofits have been playing a role in promoting greenbelts and greenzones outside major cities. The greenbelt around Toronto, which was created by the Government of Ontario in 2005, was the direct result of lobbying by NGOs with strategic support from foundations. In Halifax, a greenbelt is part of the solution to urban sprawl being put forward by Our HRM Alliance (see Box). Finally, in Montreal, a movement is building to create the Montreal Archipelago Ecological Park, a “green spider web” of connected and unconnected green spaces throughout the region that would be established as a provincial park. The initiative is being led by the Montreal Green Coalition Verte and has been endorsed by many municipal councils in the region, as well as provincial and federal agencies.¹⁶¹

Parks and open space

Urban parks have traditionally been managed by people who lacked experience in ecological landscaping or in the range of opportunities that parks can offer for recreation, education, wildlife habitat, farming, and community building. Some municipalities are beginning to change this by naturalizing parks and introducing new programming (e.g., parkland around Queen’s Park in the City of Toronto). In addition, nonprofit organizations have sprung up across the country to promote the health and expansion of parks and open space.

The Rouge Park in Toronto is the largest urban park in North America. Established in 1995 by the Province of Ontario (due in large part to the lobbying of one group, the now defunct Save the Rouge Valley System), the park consists of 50 square kilometres of forest, meadow, wetland and other landscapes in the City of Toronto and neighbouring municipalities. The Rouge Park Alliance, a partnership among federal, provincial, regional and local governments, was created at the same time to manage the park. The Alliance helps fund (along with TD Friends of the Environment Foundation, the Ontario Trillium Foundation, the Ivey Foundation, the Friends of the Greenbelt Foundation, and the Toronto Atmospheric Fund) the Friends of the Rouge Watershed, a nonprofit community group that works to restore ecological features in and around the park and engages in public education.¹⁶²

In Fredericton (NB), a partnership between a local nonprofit and the municipality allowed for the creation of a new park. Called Hyla Park, after the amphibian it protects, this 8.84-hectare area had been used as a quarry site and community dump. In February 1995, local naturalists brought the potential importance of the site to the attention of city council and, in September of

160 thiscitylife.tumblr.com/post/24849821183/metro-vancouvers-green-zone

161 www.greencoalitionverte.ca

162 www.frw.ca

that year, the City of Fredericton and the Nature Trust¹⁶³ entered into a lease agreement that enabled the creation of Hyla Park Nature Preserve – the country’s first amphibian park. While the City bears most of the responsibility for park maintenance, the Trust is actively involved in educational programming and ecological monitoring, and is responsible for the site’s development and administration through its Hyla Park Stewardship Committee.

Park People¹⁶⁴, is a nonprofit group that partners with communities, parks staff and private enterprises, to revitalize underperforming parks in Toronto. It facilitates neighbourhood engagement in city parks, is building a network of local community park groups, and acts as a watchdog on issues affecting parks. The group was founded in response to a report (funded by the Metcalf Foundation) entitled “Fertile Ground for New Thinking: Improving Toronto’s Parks”. Park People recently received a large grant from The W. Garfield Weston Foundation to support innovative new park initiatives across the City of Toronto.

Evergreen is the nonprofit organization in Canada that is most closely associated with urban greening.¹⁶⁵ Since 1991, Evergreen has worked to bring nature back to cities across the country with funding, plant resources and nurseries, expert advice and organizing capacity. It has helped fund over 3,000 school ground greening projects (its Learning Grounds program) and over 2,000 community greening projects (its Common Grounds program) in parks and public spaces (see Box). The group receives support from government and corporate donors as well as foundations such as Trillium, the Max Bell Foundation, the TD Friends of the Environment Foundation, and the EJLB Foundation.

Evergreen’s most ambitious greening project is the Brick Works, a former industrial site in Toronto’s Don Valley that has been transformed into a community learning centre and an ecologically restored urban park.¹⁶⁶ It comprises 16 rehabilitated buildings that house a local farmers’ market, native plant nursery, office space, café and pavilions for outdoor events. The site hosts children’s summer camps, workshops, and community events. Evergreen carried out this \$55 million capital project with support from the federal and provincial governments, foundations such as McConnell, and individual and corporate donors. The Brick Works is a social enterprise; it generates retail, leasing, event and parking revenues to help cover its operating costs

A unique initiative in this field is Pollination Park, a proposed 45-hectare park with pollinator-friendly plants on a decommissioned landfill site in Guelph (ON). The project was launched by Pollination Guelph, a registered nonprofit group that promotes awareness of the role of pollinators in achiev-

163 www.naturetrust.nb.ca/wp

164 www.parkpeople.ca

165 www.evergreen.ca

166 www.evergreen.ca



The North Vancouver City Parks Rehabilitation Project, North Vancouver¹⁶⁵

In 2001, Evergreen began The North Vancouver City Parks Rehabilitation Project to address the deterioration of natural areas in city parks. These are areas that had suffered from the effects



of intensive recreational use as well as stream bank erosion and invasive plants. To combat these issues, Evergreen created a long-term environmental education program and a community stewardship group aptly named “City Park Stewards.” The City Parks Rehabilitation Project focuses primarily on the removal of invasive plant species and replanting the park with native trees, shrubs and wildflowers. Local residents, businesses and nearby schools

are directly involved in restoration activities, which are educational, and build community cohesion. Since the project began, community stewards have helped Evergreen remove 533 cubic meters of invasive species and replace them with over 8,000 native plants. Evergreen hosts year-round public stewardship and restoration activities throughout the City of North Vancouver, including free interpretive walks, workshops and a monthly stewardship event the last Saturday of each month.

Evergreen

ing environmental sustainability.¹⁶⁸ The project is being planned by a technical committee led by Pollination Guelph and the City of Guelph. The site is currently undergoing infrastructural changes to accommodate the new pollinator plants and species. Until the site can accommodate plants, volunteers working with Pollination Guelph are conducting an educational and awareness raising campaign and creating sample plot sites on private and public lands throughout Guelph. Pollination Park will be one of the first and largest pollinator initiatives to occur in the world.

There are a large number of local nonprofit organizations working to build the urban forest, not just in public parks but also on other public lands, such as city streets, and in private yards. These groups are often made up of amateur or professional arborists, environmentalists, and academics. They lobby for policies to protect and expand the urban forest, offer educational programs, organize stewardship and tree-planting activities, and undertake research. Many of them are registered charities supported by their members, local businesses and community foundations. For example, since 1996, LEAF (Local Enhancement and Appreciation of Forests) has engaged the residents of Toronto in urban forest issues through a subsidized Backyard Tree Planting Program, hands on stewardship projects, guided Tree Tours, and the Tree Tenders Volunteer Training Program designed to give individuals the tools

¹⁶⁷ www.evergreen.ca/en/programs/evergreen-bc/north_van_parks.sn

¹⁶⁸ www.pollinator.ca/guelph

to become engaged in urban forest issues in their communities. Many other cities in Canada have similar groups, including London,¹⁶⁹ Hamilton,¹⁷⁰ and Winnipeg.¹⁷¹

Some nonprofits have a strong social justice dimension and direct their urban greening efforts to marginalized communities. A good example of this is the Montreal Urban Ecology Centre's program entitled *La ville en vert* (the City in Green).¹⁷² This is a three-year project that the Centre is conducting in collaboration with the Office municipal d'habitation de Montréal (OMHM) (Montreal Municipal Housing Office). The project creates cool islands of vegetation and improves the environment of low-income housing complexes in Montréal while involving renters (and professionals) in the planning, designing, and renovating of their environment. Each of the 10 projects involves the planting of trees, shrubs, and climbing plants, all within the context of the OMHM's major, scheduled construction projects. The project is supported by the Quebec government's *Fond vert* (Green Fund).

Evergreen also participates in projects that bring a social dimension to city greening. Recently, for example, the organization partnered on a building project with Habitat for Humanity in Edmonton to install ecologically-friendly habitat gardens at a low-income, high-crime area located in the Norwood community.¹⁷³ The project consists of nine units that were completed in the spring of 2008. Each family selected their preferred plants species and Evergreen worked with them to install ecologically sustainable/community friendly landscapes.

Depaving

The surfeit of paved surfaces in Canadian cities is contributing to numerous environmental problems, including increased run-off, erosion of shorelines, and polluted waterways. Interest in "depaving" is increasing in Canadian cities after the success of Portland's (Oregon) Depave group, which has transformed dozens of surplus driveways and parking spaces into green spaces and gardens that naturally mitigate stormwater runoff and pollution. Depave began as an unsanctioned, self-organized neighbourhood effort but has blossomed into an influential nonprofit that has spurred similar initiatives in Canada.

The best example to date of this type of initiative is the Depave Paradise program that is being delivered in six communities (Toronto, Hamilton, Kitchener-Waterloo, Collingwood, North Bay, and Kingston) in Ontario through Green Communities Canada and affiliated local organizations.¹⁷⁴ In Kingston, for example, an enterprising nonprofit called Hearthmakers is lead-

169 www.reforestlondon.ca

170 www.releafhamilton.ca

171 www.savetheelms.mb.ca/broadwayProject.htm

172 www.urbanecology.net/ville-en-vert

173 www.evergreen.ca/en/programs/communities/community-development/habitat-for-humanity-edmonton.sn

174 www.depaveparadise.ca



ing an initiative to depave 300 square metres of asphalted surface at a downtown school, using volunteer (parents, teachers, students, and community) labour.¹⁷⁵ The group holds workshops to teach people how the work should be done and to encourage other depave projects to start up. The Depave Paradise project is part of a larger stormwater management initiative by Green Communities Canada called RAIN^{175b}, and is being financially assisted by the Commission for Environmental Cooperation,¹⁷⁶ the Metcalf Foundation, and the EJLB Foundation.

Green roofs and walls

Communities are beginning to understand the strategic value of greening local infrastructure to maintain and support ecological functions in the city. Green infrastructure (meaning vegetation that serves human goals) can reduce the environmental impacts of development and long-term costs to municipalities and developers.

The most commonly cited types of green infrastructure in cities are green roofs and walls. Interest in this topic is burgeoning based on the growing recognition that green roofs and walls create habitat, reduce building energy use, and help manage stormwater. The foremost nonprofit association promoting green roofs and walls in North America is Green Roofs for Healthy Cities, based in Toronto.¹⁷⁷ The group convenes industry professionals, academics and policy makers in major conferences, provides professional training and certification, leads standards development, and conducts research in the field. It also lobbies for policies to support green roofs; as a result, Toronto was the first city in North America to adopt a mandatory green roof policy for large commercial and institutional buildings.

Green Infrastructure Ontario is a coalition of municipal governments, conservation authorities, the landscape trades and environmental organizations that conducts public education workshops on green infrastructure and lobbies for public policies to support the development of green infrastructure in Ontario.¹⁷⁸ In particular, the coalition is attempting to persuade the government of Ontario to include green infrastructure in the definition of public infrastructure, which will make it eligible for infrastructure funding. Its steering committee includes representatives of Green Roofs for Healthy Cities, LEAF, Evergreen, and the Toronto and Region Conservation Authority. Since its official launch in 2010, more than 80 organizations, agencies and businesses have joined the coalition. The coalition has a staff person and is supported by the Ontario Trillium Foundation.

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¹⁷⁵ www.hearthmakers.org

^{175b} www.greencommunities.nonprofitwebsites.ca/programs/rain

¹⁷⁶ www.cec.org/Page.asp?PageID=751&SiteNodeID=1066

¹⁷⁷ www.greenroofs.org

¹⁷⁸ www.greeninfrastructureontario.org

Nonprofit groups in cities across Canada are involved in restoring degraded urban creeks through educational programs, sponsoring community activities, and in direct restoration efforts, often in conjunction with municipal restoration efforts.

A number of nonprofits involved in urban sustainability have installed green roofs on their own buildings. In Montreal, for example, this includes the Montreal Urban Ecology Centre's headquarters, Équiterre's Maison de développement durable, and Santropol Roulant's new facility. The Urban Ecology Centre has also produced a series of four guides on creating green roofs and one guide on green walls.

Creek/stream restoration

Urban creeks have been severely degraded through abuse and neglect. This trend is being reversed in places where municipal governments are adopting policies to preserve or restore natural areas along creeks and encourage development practices that minimize flooding and erosion of stream courses. Non-profit groups in cities across Canada are involved in restoring degraded urban creeks through educational programs, sponsoring community activities, and in direct restoration efforts, often in conjunction with municipal restoration efforts. Most of these groups are small and focused on a particular stream or creek, often relying on small grants and volunteer labour.

For example, Still Creek in Vancouver is the last remaining stream in the urbanized portion of Vancouver that is not completely buried. However, it is below ground in culverts for some of its length, channelized in other areas, and is clogged with garbage and invasive plant and fish species. The City aims to open up the culverted portions of the stream and restore its entire length to a more natural condition. The restoration of the creek is being carried out in partnership with local community groups. The Still Creek Stewardship Society engages the public in educational events about the creek, planting projects, native fish releases and a water quality monitoring program. Another group (which is funded in part by the Vancouver Foundation and Vancity Foundation) called Still Moon Arts launched the Still Creek and Renfrew Ravine Stewardship Project in 2003. The initiative involves working with artistic, environmental, community-oriented, and educational organizations to study, steward, and enhance Still Creek. The group sponsors an annual festival, engages the community in art and native planting projects, and organizes a youth mentorship program at the local high school to train leaders for community stewardship and habitat restoration projects. Native fish are returning as the stream is restored.

The Friends of the Don East is a membership-based charitable organization that has worked since 1993 to protect and enhance the central and eastern portions of the Don watershed in Toronto.¹⁷⁹ The group's primary mandate is educational and community involvement programs to protect the natural heritage and ecological integrity of the east Don watershed. Its programs have included the Another Yard for the Don program, which encouraged homeowners to grow native plants and create pesticide-free zones and Trees

¹⁷⁹ www.web.ca/~fode



Count, a survey of street trees in the watershed. One of the group's ongoing projects has been the restoration of the Taylor-Massey Creek, a tributary of the Don River. The group has conducted naturalization projects and created a web-based portal that provides detailed information about the creek. The group has also submitted a plan for rehabilitating the watershed to the City of Toronto. The five-year plan calls for bike and walking trails, additional forest cover, regeneration of four degraded reaches, and the creation of community steward groups. The plan was the first comprehensive community-organized watershed regeneration plan in Ontario. The group has corporate sponsors and has received grants from the Trillium Foundation for project-specific work.

Another interesting initiative in the Toronto region is the Sustainable Neighbourhood Retrofit Action Plan (SNAP), a program led by the Toronto and Region Conservation Authority to help existing neighbourhoods become more environmentally friendly.¹⁸⁰ The SNAP process brings together residents, businesses, community groups and government agencies to develop a green action plan for the neighbourhood. For example, Black Creek gives its name to a neighbourhood in northwest Toronto. Unfortunately, the neighbourhood's hard surfaces of roofs, roads and parking lots contribute to degraded water quality and increased erosion in Black Creek, as well as localized basement flooding. The Black Creek SNAP (which is funded in part by the Metcalf Foundation) is helping reduce stormwater runoff by greening the neighbourhoods private and public lands.¹⁸¹ Initiatives include an enhanced street tree canopy and encouraging private gardens and more trees on private lands, such as around office buildings and residential towers and in yards.

Public education and awareness

There are countless nonprofit community groups across the country engaged in activities designed to build local awareness of specific urban ecological features or a more general appreciation for urban greenspace and biodiversity. Programs often include educational walks, workshops and lectures, resources for educators, research reports, brochures, and campaigns to involve the public in restoration activities. There are many examples of such groups reaching out to ethnic minorities and marginalized youth. Many groups are registered charities, depending on small donations and the volunteer labour of their members.

In the Vancouver region, for example, the Stanley Park Ecology Society does educational programming for adults and school children in Stanley Park,¹⁸² the Green Club conducts walks in English and Mandarin in order to promote environmental and cross-cultural understanding throughout Vancouver,¹⁸³ the False Creek Watershed Society connects people to urban nature

¹⁸⁰ sustainableneighbourhoods.ca

¹⁸¹ sustainableneighbourhoods.ca/v2/neighbourhoods/black-creek.dot

¹⁸² stanleyparkeccology.ca

¹⁸³ www.greenclub.bc.ca

both past and present through walks in the False Creek area,¹⁸⁴ and the Burns Bog Conservation Society offers educational programs including interpretive tours, field trips, and summer day camps in the Burns Bog peatland, which has been threatened by urban development for many years.¹⁸⁵

A unique initiative in Edmonton is the Newcomers' BioKit Project, launched by the Edmonton Mennonite Centre for Newcomers¹⁸⁶ and the City of Edmonton. With funding from Environment Canada's EcoAction program, this project provides education and outreach to 100 immigrant families in Edmonton about local natural areas and biodiversity. The BioKit, a biodiversity education tool, includes information about the city's natural areas and biodiversity. Hands on training events were organized tailored to different immigrant groups, including English language learners, families with pre-school age children, community groups and youth.

A lot of NGO work in this field is dedicated to educating young people on the importance of protecting green spaces and biodiversity in cities. For example, the Canadian Network for Environmental Education and Communication¹⁸⁷ is encouraging schools to incorporate material on urban nature and horticulture into their curriculum while organizations like Evergreen are helping school yards to be greened and naturalized with the participation of students, teachers, and parents.¹⁸⁸

Another major program in this connection was Green Street, a national environmental education program that operated between 1999 and June 2010.¹⁸⁹ The goal of the program was to encourage active participation of young people in environmental stewardship, much of it centered on community and schoolyard greening. Green Street fostered the emergence of a community of learning that involved students, teachers, environmental educators, program managers, researchers and advisors. The program was funded by the McConnell Foundation and the Vancouver Foundation. The Green Street program has been superseded by Imagineaction, which has a broader focus (see below).

Land trusts

Typically funded by government, citizens, or NGOs, community land trusts are effective tools for preserving land in and near cities. Land trusts acquire, hold and lease land for social purposes, including the preservation of farmland, forests, or wetlands.

For example, the Edmonton and Area Land Trust is a nonprofit conservation organization dedicated to conserving the natural heritage of the

184 www.falsecreekwatershed.org/

185 www.burnsbog.org

186 www.emcn.ab.ca

187 www.eecom.org

188 www.evergreen.ca/en/programs/schools/index.sn

189 www.green-street.ca



region through private stewardship.¹⁹⁰ The organization (which was launched with assistance from the Edmonton Community Foundation) is a partnership among the Edmonton Community Foundation, the City of Edmonton and other stakeholders. In BC, a land trust was created on an abandoned parcel of farmland by the District of Saanich in order to prevent the land from being developed. The land is now being leased to the Haliburton Community Organic Farm Society to practice sustainable farming and engage community members in sustainable food production.¹⁹¹

In Quebec, an organic farm near Montreal under threat of urban development was turned into a land trust with the help of a nonprofit organization called Protec-Terre.¹⁹² This group is dedicated to conserving farmland and ensuring that urban dwellers have access to locally-produced organic food. The organization sold “social green shares” in the project and used the money to purchase the land but left the farm buildings, equipment and harvest in the hands of the family that has owned the farm for 40 years. Shareholders are guaranteed a CSA basket (at cost) in perpetuity.

Guerrilla Gardening

Guerrilla gardening is gardening on land that the gardeners do not have the legal right to use; often an abandoned site or area not cared for by anyone. Guerrilla gardening usually involves the planting of flowers, edible plants, and other native plants. Toronto’s Guerrilla Gardeners is a grassroots group that organizes plantings in specific locations via its website. Participants bring gardening tools, seeds, water, etc. The group recently received a grant from the Toronto Awesome Foundation. There are guerrilla gardening groups in other major cities across the country, including Halifax, Montreal, Winnipeg, Calgary, and Vancouver. Most groups use Facebook or Meet Up to organize planting events.

Bottom line

The initiatives described above attest to the growing importance of the non-profit sector in creating and preserving green spaces in Canadian cities, in educating and engaging the public in stewardship activities, and in conducting relevant research. This field benefits from having major national organizations – especially Evergreen – working alongside municipalities and local community groups and from the immense amount of expertise at the disposal of such groups in fields related to urban ecology, habitat restoration, and monitoring. Funding is needed to scale up successful local projects, to communicate success stories, to conduct the research needed to demonstrate the value of urban green spaces, and to champion urban green space as a key policy issue for governments at every level.

¹⁹⁰ ealt.ca

¹⁹¹ haliburtonfarm.org/wp

¹⁹² www.protec-terre.org

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Democracy and social inclusion

A sustainable city is not merely a green, energy efficient, walkable and compact city. It is also one in which all social groups feel a sense of belonging and take part in the life of the city and benefit from our progress towards healthier, more vibrant and beautiful cities. Above we have reviewed many of the environmental issues associated with urban sustainability, and noted the social component of initiatives where relevant. This review of urban sustainability issues would be incomplete, however, without some focused attention on the social dimension. In this section we review some initiatives related to democratic engagement and social inclusion.

Democratic engagement

Democratic engagement is an essential element of urban sustainability. There is a widespread belief among those involved in this field that urban sustainability can only be advanced through the engagement of all social sectors in the democratic life of the city – not just elections, but public discussions and debates, and on-the-ground initiatives. Engagement brings forward the best ideas, builds commitment to improving the quality of community life, and helps overcome intolerance and other causes of social friction. However, there are few initiatives in Canada that specifically address the issue of empowering local citizens to participate in urban sustainability initiatives.

One exception is the Montreal Urban Ecology Centre, which has a double mandate – to promote urban sustainability and ecological citizenship. The Centre has organized five Citizen's Summits, which bring together environmental, anti-poverty, women's and labour groups to discuss important issues affecting the city and generate proposals for change. The summits have resulted in a number of important initiatives, including The Montreal Charter of Rights and Responsibilities, adopted by the City of Montreal, and the Citizen Agenda for participatory democracy.¹⁹³ The Centre has also been a steadfast advocate of a participatory budget process and played an important role in the decision of the Plateau Mont-Royal borough council to allow part of its annual budget to be decided in citizen forums. Since 2005, the Centre has been gradually developing plans to create a School of Urban Citizenship, an ambitious popular education initiative, the goal of which is to encourage more citizens to become involved in the planning and development of their neighbourhoods and cities. Meanwhile, the Centre engages in short-term democracy building initiatives such as popular education workshops on issues related to urban sustainability and production of a public participation guide for citizens.

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193 www.urbanecology.net/projet/montr-al-citizen-summit



Think City in Vancouver is another nonprofit dedicated to encouraging and facilitating citizen engagement with key urban issues, including environmental and social justice issues.¹⁹⁴ Launched in 2002, Think City is based on the premise that citizens can make the best decisions about the kind of city they want when they are given the support and tools they need. The organization has developed expertise in producing large-scale citizen participation exercises through public forums, workshops, surveys and hallmark conferences. For example, its Dream Vancouver process (2007-2008) brought people together to discuss their public policy ideas and priorities for the City of Vancouver. The initiative involved thousands of people through conferences, forums and workshops, and on-line surveys. A 15-point plan emerged from this process, which was endorsed by the winning mayoralty candidate. The organization has received grants from Tides Canada, Sustainable Cities International, the Columbia Institute and Vancity.

An emerging type of initiative linked to citizen empowerment is “Change Camp”. Change Camps are usually one- or two-day events that attempt to restructure the relationship between citizen and government by involving the citizen in actively finding solutions to issues of public concern. In essence, they are a new forum for developing solutions to problems that are, especially thorny. The events attract government officials, activists, academics and average citizens and have very loose agendas, which participants are invited to fill in with workshops of their own conception. The atmosphere at the events is collaborative and fun and the momentum generated at the event may allow some of the proposed solutions to be implemented post-event. Vancouver¹⁹⁵ and Toronto¹⁹⁶ have had Change Camps so far and camps in other cities are being planned. Change Camps are not specifically focused on urban sustainability, but many of the issues addressed at these events would fall under that rubric as the focus is on community issues.

Another interesting initiative is The Catalyst Centre in Toronto, a popular education collective committed to democratic, social justice education and community development.¹⁹⁷ Popular Education is “a movement, a practice and a theory of social change that is based on learning and is committed to resisting unjust uses of power.” The Centre publishes resources on popular education and runs the School of Activism, a series of conferences and workshops on citizen engagement. However, the Centre focuses more on labour and social issues and is not directly linked to urban sustainability issues.

194 www.thinkcity.ca

195 www.depaveparadise.ca/index.html

196 changeecamp.ca

197 www.catalystcentre.ca

Social inclusion

Social inclusion refers to the need to reach out to vulnerable and marginalized populations to ensure they share the benefits of moving towards urban sustainability objectives. Many of the food initiatives described above have an important social inclusion dimension and activists and funders in this field have increasingly come to the realization that food system programs are less *about* food and more about building communities and linking participants to each other and the wider society *through* food. To some extent, this is also true of greenspace initiatives, which sometimes involve an attempt to reach out to disadvantaged groups. Beyond this, however, there does not appear to be a strong social inclusion motif to many urban sustainability initiatives in Canada.

Likewise, there are interesting social inclusion programs built around non-environmental issues that have not (yet) developed a strong environmental dimension. For example, the Tamarack Institute for Community Engagement is a Canadian nonprofit organization founded in 2001 for the purposes of poverty reduction through the process of community engagement. It does so by focusing on the social process along with local leadership in order to build relationships among individuals and foster trust. The objective is to frame and identify community issues and articulate the social process in a way that will engage people from a broadly inclusive selection of community sectors. Despite its evident success in mobilizing many communities in Canada to fight poverty, the Institute does not make strong links to environmental issues.

In Vancouver, the Carnegie Community Centre Association's Carnegie Community Action Project¹⁹⁸ is working with Downtown Eastside residents to implement the Vision for Change that was created as a result of two years of consultations with 1,200 residents. The Vision is being implemented by residents participating in city planning processes such as the Local Area Planning Process, reviews of official development, revitalization, hotel maintenance and housing plans and a social impact study of market development. Key action items in the Vision include getting more social housing in the Downtown Eastside, slowing gentrification, tackling systemic poverty, improving services and involving local residents in making decisions about their own community. The project is meant to ensure that changes in the area do not push out lower-income individuals. However, the project does not address environmental issues.

The Centre for City Ecology¹⁹⁹ (with funding from the Metcalf Foundation and the Ontario Trillium Foundation) is participating in a Metcalf Foundation collaborative called Resilient Neighbourhood Economies (RNE). This is a pilot project aimed at improving the local economies of two low-income Toronto neighbourhoods. The project aims to retain existing businesses and

¹⁹⁸ ccapvancouver.wordpress.com

¹⁹⁹ wordpress.cityecology.net



establish diverse new enterprises, create local jobs, promote a “buy locally” ethic, and generally strengthen the economic and social resilience of the two neighbourhoods. Although the program has the potential to connect with environmental issues (such as local food provision, reducing energy costs, creating green spaces, promoting active transportation) it does not as yet have a strong environmental theme.

The social group that seems to receive the most focused attention in terms of outreach and inclusion in urban sustainability programs is youth. Young people have strong ideals, lots of energy, and represent the future of our communities. They are also often marginalized in decision making and young people from disadvantaged backgrounds may lack opportunities to develop the skills they need to become fully engaged in their communities. One good example of a program that aims to address this issue is IMPACT! Sustainability Champions Training Program for Emerging Leaders.²⁰⁰ The Co-operators²⁰¹ and The Natural Step Canada²⁰² are partnering on this program to offer young people in selected centres across Canada two-day training sessions focused in two areas: realizing leadership potential and developing a sustainability project using The Natural Step Framework for Strategic Sustainable Development. After the training, participants are partnered with a sustainability professional for four months of personal mentorship. The program is co-sponsored by local foundations and corporate donors in each locale where it is offered. For example, the session in Ottawa is co-sponsored by the Community Foundation of Ottawa.

CityStudio Vancouver is an inter-institutional collaboration between the City of Vancouver and its post-secondary institutions where students could get credit working on long-term, real world projects solving urban sustainability challenges.²⁰³ The idea for City Studio began at a Design Nerd Jam in Vancouver and was then presented at the Greenest City Ideas Slam in 2010. It ended up being the first project to be funded as part of the City’s Greenest City initiative. The initiative engages students in courses and projects aimed at helping Vancouver achieve its Greenest City Goals. Students work with city staff, academic researchers and business people to design and develop projects linked to Greenest City Goals and get them going on the ground. Examples of the types of projects that have been undertaken by students within the CityStudio framework including Work and Spaces, which aims to create little parks on orphan parcels of land within the city. The program is funded by the Vancouver Foundation, the City of Vancouver and participating educational institutions.

The social group that seems to receive the most focused attention in terms of outreach and inclusion in urban sustainability programs is youth. Young people have strong ideals, lots of energy, and represent the future of our communities.

200 www.thenaturalstep.org/en/canada/emerging-leaders/students-and-recent-grads#sustainabilitychampions

201 www.cooperators.ca/en.aspx

202 www.thenaturalstep.org/canada

203 citystudiovancouver.com

Despite its fundamental importance, democracy and empowerment are relatively overlooked aspects of urban sustainability.

Another interesting development along these lines is the C-Vert project, launched by the Claudine and Stephen Bronfman Family Foundation in 2005.²⁰⁴ C-Vert offers young people from inner city neighborhoods in Quebec the chance to experience nature and develop leadership skills that can be used to help their communities improve their environmental and social conditions. Over a two-year period, the program immerses participants in nature, offers them practical workshops on environment and ecology, and encourages them to participate in community initiatives in neighborhoods where they live. Participants often work with municipal agencies to improve community sustainability, such as helping to expand the bike path network. Partners include the David Suzuki Foundation, the YMCA, Tohu Circus, and municipal and provincial governments. This program was scaled up from a pilot in the St. Michel neighbourhood of Montreal, to the City of Montreal and then other cities in Quebec, including Gatineau and Quebec City.

A national program of interest in this regard is Imagineaction (which superseded the Greenstreet Program, as mentioned above). Imagineaction is designed to facilitate teacher-student-community interaction and stimulate initiatives towards community sustainability.²⁰⁵ The initiative builds on the earlier successful program by enhancing the strictly environmental focus to include a focus on health, poverty, participatory citizenship, and leadership. The program offers teachers and students a series of web-based resources to help them initiate social action projects tied to both curricular and co-curricular activities, and gives them access to an electronic showcase of projects and community experts related to each of the Imagineaction themes. The program has been funded (among others) by the McConnell Foundation and the Vancouver Foundation and steered by the Canadian Teachers' Federation.²⁰⁶

Bottom line

Despite its fundamental importance, democracy and empowerment are relatively overlooked aspects of urban sustainability. Much activity related to food systems in cities is addressing issues such as social marginalization, alienation, and community building, but in most other urban sustainability fields, this is a secondary concern among nonprofits. As a result, there is a danger of moving towards a model that some people call “urban sustainability for the rich.” Funders could help to emphasize the importance of this aspect of urban sustainability in their funding decisions linked to environmental issues such as green spaces, transportation, sprawl, energy and so on. Beyond this, there is a need for major new initiatives in this field. As few nonprofits in Canada are equipped to launch major programs in this area, funders will need to help build the social capacity to undertake this work.

²⁰⁴ www.c-vert.org

²⁰⁵ www.imagine-action.ca/about

²⁰⁶ www.ctf-fce.ca



Community sustainability planning

The last decade has seen a dramatic increase in the level of interest and resources dedicated to community sustainability planning (CSP). CSP differs from conventional community planning in a number of important ways: CSP is characterized by its emphasis on integration among environmental, social, economic and cultural aspects of community functioning, and the central role played by stakeholders and other members of the public in the planning process. Moreover, CSPs tend to deal with a wider array of issues, normally outside the scope of conventional land use planning, including energy/climate change, watershed management, cultural diversity, and public health. CSPs tend to take the form of “umbrella” documents that are designed to give direction to the creation or review of other planning documents, including land use plans. And although local governments almost always play a major role in developing and implementing CSPs, they are often in the position of partner rather than leader of CSP processes.

CSP got a boost from the federal government under the 2005 Federal Gas Tax (FGT) Agreement, which tied funding for municipal infrastructure projects to the preparation of an Integrated Community Sustainability Plan (ICSP) in most provinces. An ICSP is defined as a long-term plan, developed in consultation with community members, which provides direction for the community to realize sustainability objectives, including environmental, cultural, social and economic objectives.

Support to municipalities

In response to the Federal Gas Tax initiative, nonprofits have emerged to assist communities (especially smaller ones) in the preparation of ICSPs. In BC, for example, the Fraser Basin Council launched the Smart Planning for Communities program in 2005.²⁰⁷ This program assists local and First Nations governments in preparing sustainability plans by providing online information resources and planning tools, and in person facilitation and other services. The Council has five regional coordinators who work with communities across the province. The initiative is supported by federal and provincial government, corporate and foundation grants (i.e., The BC Real Estate Foundation).

There is no single, universally-accepted approach to CSP, but there are a number of specific approaches, some of which are promoted by nonprofit organizations. The best known is probably the Natural Step, a science-based definition of sustainability and a strategic planning framework to help communities (and other organizations) make planning and development decisions to move them step-by-step towards a sustainable future.²⁰⁸ This integrated,

²⁰⁷ smartplanningbc.ca

²⁰⁸ www.thenaturalstep.org/en/canada/solutions-communities

systematic approach to community planning helps stakeholders develop a common language and shared vision for sustainability in their community. It links long-term sustainability goals with short-term decisions and managing processes (e.g., capital investment guidelines, procurement policies, environmental management systems) and assists with education and training programs for municipal staff and community stakeholders. The framework enables communities to simplify complex systems of human-environment interactions and therefore better understand how goals related to sustainability can better be achieved.

Natural Step Canada has advised dozens of communities, including the resort community of Whistler (BC), which has adopted a comprehensive plan for sustainability that is guided by the system conditions of the Natural Step framework. Canmore (AB) has embarked on a Green Municipal Fund supported community planning program using the Natural Step process. Strathcona County, near Edmonton, is also using Natural Step principles in formulating its Municipal Development Plan. On the east coast, the Town of Wolfville (NS) is also using a TNS framework to prepare a Sustainable Community Plan and Municipal Planning Strategy and the Halifax Regional Municipality has used the framework in its corporate sustainability analysis. The McConnell Foundation has helped support some of this work.

An enterprising nonprofit, the Whistler Centre for Sustainability, has partnered with The Natural Step Canada to launch the Quick Start ICSP initiative.²⁰⁹ The project provides smaller communities (with smaller budgets for public consultation) with a streamlined process for creating a comprehensive sustainability plan. The process goes beyond planning into implementation by integrating the plan results into reports to council, municipal budgets, and so on. The partnership would like to expand this program across Canada if funding can be found.

Monitoring and implementation

As the urban sustainability movement matures, there is more attention being paid to the need to monitor and report on progress towards sustainability goals. Monitoring programs typically use a series of indicators that reflect larger trends. Sustainability indicators cover environmental, social and economic issues in the community. Some monitoring initiatives are launched by the municipality in question while others are led by nonprofits (national, provincial or community level), with or without municipal buy-in.

A good example of sustainability monitoring in Canada is the Whistler2020 Monitoring Program, which tracks and reports on progress toward the vision, priorities and sustainability objectives found in Whistler's com-

209 www.whistlercentre.ca/2011/pdfs/QuickStartSuite.pdf



munity plan.²¹⁰ The program includes four core value indicators and 96 other indicators linked to the 16 strategies identified in the Whistler2020 plan, plus other contextual community indicators. Progress is reported at least annually for most indicators. Whistler council receives the report and uses it during the annual review of priorities and goals for the town. Although the monitoring was initially carried out in-house by municipal staff, since 2008 it has been led by the Whistler Centre for Sustainability. The Centre takes the expertise from its Whistler experience to deliver consulting services to other local governments, especially smaller municipalities.²¹¹ The Centre received some funding from the Vancouver Foundation and the BC Real Estate Foundation.

Many other communities in Canada have undertaken sustainability monitoring initiatives using indicators. Some of these are being led by municipalities while others are being led or co-led by NGOs. A good example of the latter approach is Winnipeg's "Peg", a community indicator system that has been developed by a community-wide partnership spearheaded by the International Institute for Sustainable Development (IISD), which has its headquarters in Winnipeg, and the United Way of Winnipeg.²¹² The system tracks indicators that relate to the economic, environmental, cultural and social sustainability of the community. To understand what indicators need to be tracked, Peg continually engages Winnipeggers to assess what they most value in their community and select the indicators that best reflect those values as progress is measured over time. Peg presents data for each indicator through charts and maps through its web portal, along with stories from the community about how the issues underlying the indicators are reflected in the lives of Winnipeggers.

Other nonprofits have worked more or less independently of the municipal government to create monitoring programs. A good example of this is Sustainable Calgary, which has prepared four community sustainability indicator reports since 1998, with the most recent release being 2011.²¹³ To prepare the reports, the project team coordinated dozens of presentations and workshops across the city among groups as diverse as the Rotary Club, City Council, the Developmental Disabilities Resources Centre, and many neighbourhood associations. The 2011 report includes 36 indicators covering community fabric, economy, education, natural environment, resource use, and health/wellness. The initiative is funded in part by the Calgary Foundation, the City of Calgary, and the Alberta Ecotrust Foundation.

A number of nonprofit organizations involved in urban sustainability research have undertaken studies using indicators to assess progress on community sustainability. Smart Growth BC published three Sprawl Reports using in-

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210 www.whistler2020.ca/whistler/site/genericPage.acds?instanceid=1986170&context=10000315

211 www.whistlercentre.ca

212 www.iisd.org/measure/tools/indicators/winnipeg.asp

213 sustainablecalgary.org/state-of-our-city-2011

dicators to highlight sustainability trends in dozens of BC communities.²¹⁴The Pembina Institute undertook similar research for communities in Ontario.²¹⁵

Bottom line

Municipal capacity for community sustainability planning and monitoring is limited due to the integrated nature of the exercise, lack of expertise, and funding constraints (especially among smaller and medium-sized communities). For larger municipalities where plans are often in place, the challenge is more centered on implementation and budgets. FCM is already making an important contribution in this area through training programs and funds provided through the Green Municipal Fund. Other nonprofits could play a bigger role in assisting municipalities with technical expertise, sharing success stories, toolkits and so on, but resources are needed if they are to scale up their operations. Looking at new ways of partnering with municipalities on their existing sustainability priorities might be a useful way to address the gap between local government sustainability policies and commitments and their implementation.

Monitoring is being done on a scattered basis across the country by municipalities and nonprofits but there is no unified approach in use across the country that could allow funders to gauge the impact of their urban sustainability funding programs.

Real estate development

At the heart of most urban sustainability concerns is real estate development. It is through land development that the city grows and the location, design, and composition of the growth heavily influences whether a city moves towards greater sustainability or not. Real estate development projects that favour low-density housing, non-permeable surfaces, car-dependency, and high potable water and energy use move us in the wrong direction. Those that favour walking and biking, cluster development around transit stops with daily destinations nearby, leaving as much of the site as possible in its natural state and offering a range of more compact housing types are more likely to move us in the right direction.

The nonprofit sector does not currently play a significant role in influencing the location and shape of real estate development in Canada. The development industry itself is largely in charge in this field. Although provincial and municipal regulatory frameworks are supposed to guide development according to principles of “good planning”, they have generally not produced sustainable outcomes. There are, however, some exceptions to this rule and there is potential for nonprofits to play a greater role in steering development towards a more sustainable direction in the future.

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214 www.smartgrowth.bc.ca/Default.aspx?tabid=155

215 www.pembina.org/pub/1512



Standards and certification

To a large extent, nonprofits in this field are involved in setting standards and certifying real estate projects in an attempt to leverage their influence with the development industry. The best example of this approach is Leadership in Energy and Environmental Design designation for neighbourhood developments (LEED-ND). This is a certification system that gives points based on location, energy efficiency, water efficiency, and air quality. The US Green Building Council (USGBC) developed the LEED-ND rating system in partnership with the Congress for the New Urbanism (CNU) and the Natural Resources Defense Council (NRDC) in 2008 and enrolled several pilot projects, including several in Canada. The USGBC officially launched the rating system in 2010 and the Canadian Green Building Council adapted the US program for use in Canada, with funding support from the Trillium Foundation and government sponsors²¹⁶ There are currently 238 projects applying for certification, including 24 in Canada. In Montreal, for example, this includes the Angus Technopole,²¹⁷ a recently developed mixed-use, medium-density neighbourhood in a former railway yard, Pointe Nord,²¹⁸ a high-density residential greenfield project on Nun's Island, and the University of Montreal's new Outremont Campus,²¹⁹ currently in the planning stages.

Another group in this field is BioRegional North America. This is a registered Canadian nonprofit organization based in Ottawa and associated with the BioRegional Development Group in the UK.²²⁰ The main work of the group is to designate and support the development of One Planet Communities i.e., neighbourhood- and city-scale development that conforms to the organization's strict ecological and social vision. The group advises private and public sector developers as they realize their projects, captures key lessons for sharing with other developers working on One Planet projects, and promotes the projects through the media and high-profile events. The organization also conducts ongoing reviews and monitoring of participating projects to ensure that they are meeting their commitments. At this time, the only One Planet project in Canada is the proposed Petite Rivière development in Montreal.²²¹

Nonprofit development corporations

In some Canadian cities, nonprofit development corporations have been set up with provincial or municipal mandates to redevelop or revitalize downtowns, central city waterfronts, or other sensitive areas. These initiatives help bring development activity into the centre of the city and play a role in stemming sprawl. Moreover, in some cases, these nonprofit corporations have a mandate

216 www.cagbc.org/Content/NavigationMenu/Programs/LEED/RatingSystems/default.htm

217 www.technopoleangus.com

218 www.pointenord.com

219 www.siteoutremont.umontreal.ca

220 BioRegional North America operates in the United States as a project of the Tides Center.

221 www.petite-riviere.com/en/index.asp

to promote sustainability in the target area. For example, development in The Forks area in Winnipeg is promoted and managed by the Forks North Portage Partnership. The Partnership has adopted a Target Zero policy with the goal of zero garbage, zero water consumption and zero carbon emissions for the area.²²² Several important steps have been taken in this direction, including converting the Forks Market to a geothermal heating and cooling system, the installation of a bio-composting system, and the conversion of waste fryer oil to bio-diesel to power site equipment. The Partnership is working with the Landless Farmers Collective, a group of farmers aiming to produce food on land they don't own, to set up herb and vegetable gardens in the area. All Partnership projects have to respect Target Zero standards and will incorporate green building and practices. The development corporation is sponsored by businesses in the target area, government agencies, and local foundations (including The Winnipeg Foundation and the Burns Family Foundation).

Universities

Universities are interesting cases in this context because they sometimes have a combination of features that dispose them to sustainable real estate ventures: the research and academic capacity to experiment with new community designs and infrastructure systems, control over large parcels of developable land, and deeper pockets than a typical nonprofit organization. Two universities in the Vancouver Region are experimenting with sustainable real estate development projects, Simon Fraser in Burnaby and the University of BC in Vancouver. Simon Fraser is building UniverCity on top of Burnaby Mountain, an eco-friendly development including a residential and commercial area occupying approximately 81 hectares adjacent to the campus. The area will contain up to 4,500 residential units in a number of neighbourhoods, along with a new town centre, schools, parks and other amenities. The project is applying for LEED-ND certification.

The University of BC's Sustainability Initiative (USI) seeks to transform the UBC campus into a living lab on "regenerative sustainability", which builds upon the Living Building Challenge and other sources of inspiration.²²³ As part of its mission, USI is pioneering the concept and practice of regenerative sustainability applied at multiple scales, e.g., buildings and neighbourhoods. The USI is housed in the new Centre for Interactive Research on Sustainability Building, UBC's flagship sustainability project and an excellent example of regenerative design. USI is now scaling up the lessons learned at the building level to apply regenerative design principles to the creation of new neighbourhood developments on the UBC campus. By combining rigorous academic research, monitoring and analysis of the project, USI will test and disseminate the concept of regenerative neighbourhood development through an array

²²² www.theforks.com/target-zero

²²³ rnp-sustain.sites.olt.ubc.ca



of academic, business, and civil society networks. The project is supported in part by the Bullitt Foundation, which is providing valuable early stage ‘seed funding’ to the research, analysis and engagement of key neighbourhood stakeholders and experts.²²⁴

Innovative technology

Funding from federal agencies such as Natural Resources Canada has helped support some real estate development projects in Canada that are testing new energy technologies. In Alberta, for example, NRCan contributed \$3.3 million to pilot a new energy technology in the Drake Landing Solar Community, which is a 52-unit housing development in Okotoks, south of Calgary.²²⁵ The housing units are heated solely by solar-heated warm water circulating through the insulated underground pipes of a district heating system. This district heating system is the first major implementation in North America of a technology known as solar seasonal storage. In Quebec City, NRCan is helping to fund an innovative biomass-fuelled district heating system with a \$4.7 million contribution to La Cité Verte, a mixed-use project of more than 800 housing units plus 7,000 m² of office and commercial space.²²⁶

NRCan also partnered with CMHC to launch the EQUilibrium Communities Initiative in 2009.²²⁷ The program provides up to \$550,000 to sustainable neighbourhood projects selected by an independent selection committee. Funding is for research, analysis, consultation and design work (not capital costs) aimed at improving the projects’ environmental performance and for monitoring and showcasing performance across six themes: energy, water, land use and housing, transportation, natural environment and financial viability. Four projects have been selected: Regent Park Revitalization in Toronto, Ty-Histanis Neighbourhood Development near Tofino (BC), Station Pointe Greens in Edmonton, and Ampersand in Ottawa.

The Green Municipal Fund (GMF) has also been involved in funding research, feasibility studies, planning studies and capital costs related to innovative technology in private and public real estate development projects across the country.²²⁸ For example, the Fund granted over \$3 million to finance the innovative energy aspects (geothermal heating) of the Benny Farm redevelopment in Montreal, originally developed to provide housing for World War II veterans and their families. In Toronto, the GMF granted almost \$1.4 million for a series of planning studies (transportation, water and sewage, business case, etc.) related to the redevelopment of Regent Park over the next 15 years

The housing units are heated solely by solar-heated warm water circulating through the insulated underground pipes of a district heating system. This district heating system is the first major implementation in North America of a technology known as solar seasonal storage.

224 There is nothing available on the Internet about this project yet, but further information may be obtained by contacting Dave Waldron, Regenerative Neighbourhoods Project Manager at: dave@synapse-strategies.com.

225 www.nrcan.gc.ca/media-room/news-release/32/2010-05/1827

226 www.nrcan.gc.ca/energy/science/programs-funding/2042

227 canmetenergy.nrcan.gc.ca/buildings-communities/communities/1603

228 www.fcm.ca/home/programs/green-municipal-fund.htm

as a sustainable city neighbourhood. One of the oldest public housing neighbourhoods in Canada, it houses 7,500 residents in 2,087 units in the core of the City of Toronto. In Victoria, the GMF funded field tests and feasibility studies relating to the Dockside Green brownfield redevelopment project. The Dockside Green project entails the reclamation and redevelopment of a 12-acre former industrial waterfront property on land previously owned by the City of Victoria.

Bottom line

Real estate development is an area that is relatively unexplored by philanthropic funders, despite its crucial role in urban sustainability. There is a need for funding to research issues related to implementing innovative technologies in a Canadian context, making the business case for these technologies, monitoring of built projects, supporting pilot projects, and lobbying for policy changes that would help bring sustainable real estate development practices into the mainstream.





Urban sustainability funders

In the previous section of this report we have focused our attention on the activities of nonprofit organizations in fields related to urban sustainability. We have mentioned the funding agencies that are supporting these activities where appropriate. In this section, we bring the funding agencies into the foreground by discussing the challenges funders are (or will be) facing as they move into this field, and exploring some options for addressing these challenges. Appendix A identifies a number of the funders currently working in the area of urban sustainability.

Challenges for philanthropic funders in this field

The rationale for the present study is related to the fact that funders in Canada are increasingly interested in entering or expanding their activities in fields related to urban sustainability. The review of nonprofit activities in the first part of this paper revealed a wide range of opportunities that funders may want to consider that would help move us towards more sustainable cities in Canada. However, there are a number of challenges that grantmakers may face when contemplating entry or greater levels of activity in this field. We briefly review them here.

Complexity of the issues

Intervention in this field requires a systemic perspective, one that involves a more robust understanding of how cities work, where the main points of intervention are and where impacts are likely to be greatest. There is a perception among funders that this field is very complicated and that it is difficult to understand fully. In some cases, it is not clear where the important levers are

Unless funders can leverage their modest resources to get private and public decisions “onside”, genuine progress on urban sustainability may be unattainable.

in moving the agenda forward. For example, should foundations fund groups that wish to launch a communication initiative to convince city planners to adopt sustainable urban design guidelines if the planners have little power to impose such guidelines on developers? Such uncertainty may deter some funders from putting more resources into the field. There is also a perception that major breakthroughs in this sector are rare because of the complexity of the issues involved. Finally, moving ahead on many issues related to urban sustainability – such as travel choices, consumption levels, waste generation habits, and housing preferences – is only possible with widespread behaviour change, which is notoriously difficult to achieve. These considerations point towards the need for preliminary work in identifying the levers of change in a community and strategizing the way forward with key stakeholders. Funders should consider building in the need for strategic research and networking into their urban sustainability funding programs. It also implies that long-term commitments are needed to ensure that nonprofits carrying the sustainability message have the staying power to see issues through. Funding cycles of one or two years after which grantees are expected to have become self-sufficient, found other sources of financing, or moved on to another initiative may not be a successful strategy in many fields related to urban sustainability. If they are to flourish, nonprofits in this field need opportunities to experiment with change strategies, to fail and then learn what works and what doesn't work, all of which requires sustained support.

Amount of philanthropic money available is small compared to the size of the problems being addressed

Municipalities and the development industry, which together drive the planning and development process in cities, spend large sums of public and private money in perpetuating existing development patterns, transportation systems, water management practices and so on. Compared to these public and private resources, grantmaking by philanthropic funders seems dwarfed in size. Unless funders can leverage their modest resources to get private and public decisions “onside”, genuine progress on urban sustainability may be unattainable. Another way to magnify the philanthropic resources committed to making change happen would be for foundations to invest their assets in vehicles that not only promise a return on investment but also have a social/environmental mission. Most foundations in Canada are using only 5% of their assets in direct grantmaking while 95% is invested in financial vehicles unrelated to the organization's mission.

Few groups with a broad urban sustainability focus to fund

There are few groups in Canada with staff and stable programs that are addressing the complex of issues around urban sustainability. This is in contrast to many non-urban fields (e.g., wildlife conservation) where large stable



groups are well established in the field and known to funding agencies. This is in part a chicken and egg issue because the lack of suitable groups means a lack of funding in this field, which may prevent stable groups from emerging or even drive existing groups from the field.²²⁹ This situation adds an additional complication for funders working in this field. They may find that they have to work with smaller groups to build the capacity to participate effectively in this sector, including research, analytical, and advocacy capacity. This in turn may require a long-term game plan over many years.

Nonprofits in urban sustainability not working together

Like their government counterparts, the nonprofit stakeholders in urban sustainability issues often work in silos or even at cross-purposes. Much of the nonprofit work done in the field of urban sustainability is carried out by local groups working with largely volunteer labour and very limited resources. Their leaders are often near burnout, working on important issues “off the side of their desks” and with little time to invest in networking with other groups in their field, let alone related fields. Given the limited amount of funder support in many fields related to urban sustainability, groups working in the same domain may feel that they are competing for grants with each other. These factors create a situation within which there is a lack of opportunities for social learning, i.e., for nonprofits and other stakeholders in the field to build on each other’s learning experiences, to share success stories, disseminate important resources, collaborate on new projects and develop community-wide strategies. Funders can respond to this by making small amounts of money available for networking activities that will build trust in the sector and build a culture of sharing as part of a funding program.

Challenges involved in scaling up projects

The sector is characterized by a large number of small groups undertaking hyper localized projects, e.g., a community garden or habitat restoration around an urban stream. While such projects are worthwhile in themselves, they are not “game changers” unless they can be scaled up. Scaling up from a community garden to addressing the urban food system presents obvious difficulties in terms of organizational capacity, coalition building, and so on. This requires consistent funder support over the long-term and even collaboration among funders in order to maximize the impact of limited philanthropic resources. However, the McConnell Foundation’s work in scaling up successful food-related initiatives is an example of what is needed across the full range of urban sustainability issues.

²²⁹ This was the case with Smart Growth BC, a large stable group that disappeared from the field due to funding difficulties.

Finding the right relationship with municipalities

Funders involved in urban sustainability issues often have to face the question of how best to work with municipal governments. For sustainability programs to succeed, some form of cooperation among funders, nonprofits and municipalities is often essential. Identifying the best form of cooperation can be tricky. On the one hand, philanthropic funders do not wish to fund what should be done or what can only be done by local or regional governments. Infrastructure funding and core services are examples that come to mind. On the other hand, it is clear that municipalities in Canada do not have sufficient revenues to fund initiatives related to the growing expectations linked to urban sustainability. Municipalities are notoriously under resourced and have very little room for discretionary spending. As a result, few can afford even the small amounts of money needed to embark on innovative (but risky) projects that could have significant positive repercussions. This is especially true for medium sized and smaller communities. For example, developing a strategic plan to address climate change takes staff time or a consulting budget for community consultation, technical studies and working with community leaders. FCM is already working in this field with grants for staff or consulting time but there is room for other funders such as community foundations to assist with this work. The challenge for funders is to identify initiatives that municipalities do not have the resources to initiate on their own but could carry through with and scale up once they are of proven value. Examples of such initiatives might include research studies, program design studies, staff training, pilot projects, demonstrations, or other work that is preliminary to the launch of a new program. The fact that philanthropic resources are quite limited in Canada adds extra weight to ensuring that they are deployed as strategically as possible.

In some cases, especially in larger cities, municipalities may have discretion to launch a new granting program in partnership with a philanthropic partner. The Greenest City Fund in Vancouver is a good example of this type of direct collaboration. This fund was set up in early 2012 through a collaboration between the City of Vancouver and the Vancouver Foundation. Each partner put up \$1 million to create a fund that will disburse \$500,000 per year for four years. The purpose of the Fund is to invest in innovative community-based strategies to engage people around the 10 Greenest City Goals. These goals were identified when the City announced its Greenest City Initiative in 2009, i.e., to become the greenest city in the world by 2020.^{229b} Achieving the goals will require behaviour changes among residents, businesses and other actors and the Fund is conceived in order to help realize such changes. The Fund provides grants in the areas of local food, climate & green buildings, green transportation, zero waste, access to nature, clean water, and green economy.

^{229b} See: vancouver.ca/greenestcity



For example, the Fund awarded \$500 to a community group, which is now growing wheat in backyards, making bread and selling it. The Fund is beneficial to both partners: it helps reposition the Vancouver Foundation, which was better known for its work on wildlife, as a major player in urban sustainability in the region and it provides the City's Greenest City initiative with brand recognition and political credit. Interestingly, the original idea for the Fund emerged from a report from a consultant hired by the City with a grant of \$50,000 from the Bullitt Foundation (of Seattle). The City leveraged its portion of the initiative (which comes from surpluses in a reserve fund targeted at acquisition of land for city parking facilities) by seeking out a matching grant from the Vancouver Foundation. The Foundation, which administers the Fund, is expected to attract other philanthropic contributions, further leveraging the original investment.

Lack of collaboration among funders

There is a lack of vehicles for facilitating learning among funders interested or involved in this sector. Funders collaborate in informal ways, but in practice, there is little transfer in terms of which funding strategies are working or not working, which groups are promising, suitable for funding, and so on. This lack of collaboration can lead to competition among funders, duplication in their efforts and missed opportunities for effective intervention. Another dimension of this problem is the lack of shared measures of success. Each funder in this field has a different set of indicators to define success in its funding programs. This makes it more difficult for funders to find agreement on what works well and why, and more challenging for grantees to work in this field to explain the potential of their projects to funders.

Lack of policy support

Urban sustainability is an emerging field that is characterized by the need for deep systemic change, whether that be in the system of land use regulation, the pattern of transportation investment, food supply and distribution systems, how nature is integrated into urban spaces, how decisions are made in our communities, how the benefits of change are allocated to different social groups, or the underlying system of values and beliefs that underlie and preserve existing unsustainable practices. Each of these transformative changes are being hampered by the existing policy framework but could be facilitated by supportive policy changes. Foundation investment in fields where the sought after improvements are chafing against a regressive policy framework can be an expensive and ultimately frustrating experience. But the solution is not a simple one. Investment in policy change is essential but can be risky as the failure of foundation support for climate change legislation in the US (despite massive philanthropic resources committed to this objective) has shown. Moreover, support for policy change generates results that

are difficult to measure, such as developing trusting relationships with policy makers or subtle alterations in public discourse. Making policy change at any government level requires a realistic assessment of political forces, investment in research, convening the relevant stakeholders, building long term relationships with agents of change within governments, and long-term commitment to nonprofit allies and carriers of key messages.

Addressing the challenges

In this section, we present some positive examples of how philanthropic funders in Canada and the US are addressing some of the challenges raised in the previous section.

Advance policy

Major changes in how cities work cannot be achieved without major shifts in public policy. The review of nonprofit initiatives presented earlier in this paper revealed the importance of a supportive policy framework to achieving urban sustainability objectives. Indeed, many initiatives do include a policy component, whether that be in terms of transit investment, local food policy, planning regulation, or building codes. However, funders themselves are sometimes in the best position to undertake more coordinated policy initiatives given their resources, the neutral position they hold in public perception, and their understanding of the policy change process. They are also less vulnerable than NGOs to the chill on policy work due to the federal government's increased scrutiny of the charitable sector.

There are many good examples of funder involvement in policy development related to urban sustainability in Canada, but one of the most successful has been the joint funder-NGO effort to set up the Ontario Greenbelt. Several Canadian foundations – principally the Metcalf and Ivey foundations but also the Neptis,²³⁰ McLean,²³¹ and Salamander²³² foundations – collaborated with NGOs such as Environmental Defence and the Greenbelt Alliance over a one year period leading up to the province's decision to create the Greenbelt.²³³ The funders convened meetings in their offices and provided modest grants to the participating NGOs for research and consultation exercises.

The initiative was extremely successful: the province created the Greenbelt Plan and set up the Greenbelt Foundation to fund awareness and educational initiatives related to building a constituency for the new Greenbelt, while a second fund, the Broader Public Sector Investment Fund made grants to

²³⁰ www.neptis.org

²³¹ mcleanfoundation.ca

²³² www.salamanderfoundation.org

²³³ The Ontario Greenbelt is a large band of permanently protected land that sweeps around the western end of Lake Ontario. It was created by the Province of Ontario in 2005 as a way to stem the urban sprawl that has been emanating from Toronto and other lakeside cities for decades. It is considered a major achievement in preserving farmland, forests, wetlands, and other managed and natural ecosystems in a highly vulnerable area.



help build a demand for food produced in the Greenbelt. The Greenbelt also served as the cornerstone for another major policy move by the province, i.e., the Places to Grow Plan for the Greater Golden Horseshoe. A recent study has shown that the total economic impact of Greenbelt-associated activity exceeds \$9.1 billion annually and pointed to the importance of the Greenbelt plan in preserving this economic activity.²³⁴ The initiative succeeded because it built a broad base of support among grassroots groups and larger NGOs, it was supported by first-class research by the Neptis Foundation (mapping, development scenario studies, etc.), and the players had access to provincial decision makers, who were supportive of the idea. This initiative showed that grantmakers could have a dramatic impact with relatively small contributions in the right places at the right time.

Leverage funding

Needless to say, most philanthropic funders are hoping to leverage their investments so as to produce the maximum impact with the least resources. In the field of urban sustainability, this is especially important because of the immense complexity of the problems being faced, the inertia of existing systems that are targeted for change, and the massive resources available to those who resist change. Philanthropic funders are just one part of a larger ecosystem of actors, and in almost all cases they will need to engage many different stakeholders if they hope to address the challenges to achieving greater urban sustainability.

This is nowhere more apparent than with the land development process. This process is intimately linked to urban sustainability and needs to be drastically overhauled in Canada but is especially resistant to change because of the wide array of stakeholders involved in planning and development of land and the well-known conservatism of many of those actors, including municipal transportation officials, public works officials, fire chiefs, and the real estate industry itself. Philanthropic funders and their nonprofit partners can play an important role in leveraging change in this process due to their neutral position outside the play of economic and political interests involved in land use planning and design. They can play an important role in building trust among stakeholders and in providing or marshaling the expertise to move ahead with innovative community designs.

The BC Real Estate Foundation provides a good example of how funder intervention can harnesses forces for change and leverage modest philanthropic investments with the immense resources of the building industry to produce important changes in the way planning and development is done. The Foundation funded the BC Design Centre for Sustainability²³⁵ over a six-year period (2005-2011) in order to launch an innovative planning and urban de-

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²³⁴ greenbelt.ca/news/economy/new-study-shows-ontarios-greenbelt-good-economy

²³⁵ Associated with Simon Fraser University. www.dcs.sala.ubc.ca/resources.htm

sign process that resulted in a sustainable new neighbourhood in Surrey (BC), called East Clayton. The project is mixed-use and walkable, has a wide variety of housing types and good transit connections, and deals with its stormwater on site. The final design of the project was developed over several years and engaged elected officials, municipal and regional planners, the NGO sector, developers and real estate professionals, as well as other community members through a series of design briefs, research tools, stakeholder charrettes, educational events, community workshops, exhibitions and publications. Instead of the usual confrontational planning process, the East Clayton process involved the landowners and developers in a collaborative process with other stakeholders that found win-win solutions. The \$300,000 invested by the Real Estate Foundation (and other minor partners) in this process resulted in over \$1 billion in private sector investment in the development of East Clayton. Many of the design solutions used in that development have been ported to other projects in Surrey, which has further amplified the impact of the original philanthropic investment.

Work with grantees to define strategy

The traditional relationship between funders and grantees has often been one-way: grantmaking staff have consulted with their boards and, in some cases, grant recipients and NGOs, to develop a new granting stream, then potential grantees have prepared applications that are designed to meet funding criteria and funders either accept or reject the application. This model, which is beginning to change and in some cases has already changed, is not that well suited to an emerging field like urban sustainability as the funder's mandate may be evolving and key levers for ensuring change are often not that apparent to funders or even to grantees. Innovative new programs may require a more intensive collaboration between funders and grantees in order to shape a project or program that fits into the funder's overall mission while having the greatest chance of success on the ground.

In fact, there are some excellent examples of how funders in Canada have worked with potential grantees and other stakeholders to develop a grantmaking program or select projects for support. One of the most innovative is the ClimateSpark Social Venture Challenge (SVC),²³⁶ a partnership among the Toronto Atmospheric Fund (TAF),²³⁷ Toronto's Centre for Social Innovation,²³⁸ the Toronto Community Foundation (TCF),²³⁹ and others. The objective of the initiative was to engage new audiences and stimulate "game-changing" social ventures²⁴⁰ that could offer a significant greenhouse gas emissions reduction benefit through scaled-up delivery of their product or service.

²³⁶ www.climatespark.ca

²³⁷ www.toronto.ca/taf

²³⁸ socialinnovation.ca

²³⁹ www.tcf.ca

²⁴⁰ Social ventures were defined as enterprises that paired a social and commercial mission and that, while serving the broader community interest, had a plan for long-term financial sustainability.



The three stages of the Challenge were: 1) Ignite: An online crowd-sourcing competition where the online community commented on and rated venture contestants. A combination of crowd-sourced, expert and partner votes were used to select semi-finalists and finalists. 2) Accelerate: A two-day venture development bootcamp that paired finalists with expert advisors for business mentoring and general skills development related to creating and pitching a business plan. 3) Launch: A pitch session to a panel of philanthropic and venture investors and a Gala where some investments were announced and the community had a chance to meet face-to-face. TAF and TCF intended to use the Challenge to provide possible opportunities for their own investment and granting. Working with the Canadian Environmental Grantmakers' Network (CEGN),²⁴¹ they attracted two other foundations and three private investors, who agreed to participate in a funding panel and hear pitches from the ten ClimateSpark SVC finalists.

Conduct research to shape new grantmaking programs

Conducting research prior to launching a new granting program is another way of building a funding stream that is more likely to be successful in this complex field. A good example is the current effort in Quebec by a consortium of funders to work together with other stakeholders to develop a program to address the so-called "nature deficit syndrome", i.e., to better connect young urbanites to nature. There is a growing concern that the increasing "screen time", diminishing time spent outdoors, and lack of access to quality green spaces in cities (especially in less advantaged neighbourhoods) may be creating a generation of people who are alienated from nature and not prepared to fight to defend it. In response, the Claudine and Stephen Bronfman Family Foundation, David Suzuki Foundation and the Fondation de la faune du Québec pooled their resources to fund a study that would enhance understanding of the problem and produce ideas on how the funders could help address it. The "Nature Project" involved a literature review, interviews with experts in the field, and preparation of a catalogue of 100 initiatives from around the world addressing the nature deficit issue. A preliminary report served as a basis for two consultations in Montreal and Quebec City where participants were asked how best to frame the issue and propose actions to address it. Recommended actions include sponsoring "nature days" with a variety of nature-based activities offered to young people, improving access to quality urban nature, using mentors who can help young people develop an understanding for and a love of nature, revising educational curricula to require a minimum number of days doing outdoor activities, and mandating teacher training in nature appreciation. The process has identified possible partners of both the supporter and the potential grantee variety and the likely next step is the co-creation of a program or programs involving those actors.

²⁴¹ www.cegn.org

New ideas are needed to break logjams and release the energy and resourcefulness of the community. To nurture such ideas, funders need to focus some attention on creating so called “in-between spaces” for research and dialogue that are not inhibited by institutional structures.

Stimulate creative thinking

Urban sustainability is a complex field with a variety of interlinked sub issues and problems. The solutions to such “wicked problems” require new ways of seeing that advance the sustainability agenda on environmental, social and economic fronts simultaneously. Moreover, change agents in this area are facing a panoply of entrenched behavioural habits, economic interests and bureaucratic intransigence. New ideas are needed to break logjams and release the energy and resourcefulness of the community. To nurture such ideas, funders need to focus some attention on creating so called “in-between spaces” for research and dialogue that are not inhibited by institutional structures. Spaces that are considered safe for people to share their visions and test ideas can encourage the emergence of ideas that will spark the imagination of the public and foster provocative thinking.

An example of funder initiatives in this respect is Social Innovation Generation (SiG).²⁴² This initiative was launched by the McConnell Foundation in collaboration with the University of Waterloo, the MaRS Discovery District,²⁴³ and the PLAN Institute²⁴⁴ with a mission to catalyze social innovation across Canada and to link it to promising approaches around the globe. SiG develops programs to support the launch and growth of social ventures, enhancing the skills and networks of social innovators, exploring new instruments of social finance, fostering opportunities for technology platforms to help scale social ventures, and building the social innovation community.

In addition to supporting such creative spaces, funders may choose to nurture individual people who are in a position to develop ideas that have the potential to trigger social innovation. Funders can support thought pioneers by providing them with fellowships and connecting them with leaders in the community who can stimulate them and provide access to resources and visibility.

A good example of such a funder program is the Metcalf Foundation’s Innovation Fellowship program, which is directed at supporting new “thinking and doing.”²⁴⁵ This program “gives individuals of vision and creativity, people with outstanding talent and originality, the freedom to pursue powerful ideas, models, or practices that have the potential to contribute to building a healthier, more resilient southern Ontario.” The people chosen for support are recognized within their field and have worked in an area related to their proposed exploration for a minimum of ten years. The Fellowship program allows grantees to work on a project of their choice as long as it contributes to the mission of the Metcalf Foundation and one or more of its program

²⁴² sigeneration.ca

²⁴³ MaRS is a nonprofit innovation centre connecting science, technology and social entrepreneurs with business skills, networks and capital to stimulate innovation and accelerate the creation and growth of successful Canadian enterprises. www.marsdd.com

²⁴⁴ The PLAN Institute on Caring Citizenship’s intent is to be a primary source of inspiration, perspective, information, innovative ideas and demonstrable solutions related to caring citizenship. www.planinstitute.ca/?q=socialinnovationgeneration

²⁴⁵ metcalffoundation.com/what-we-fund/innovation-fellowship



areas. The program is currently supporting a fellow who is exploring the low-growth approach to economics in a regional context and in the past supported fellows who developed a series of papers on sustainable agriculture and community food hubs.

Develop indicators of success

In the review of urban sustainability initiatives in the first part of this paper, we identified a number of local initiatives to monitor community progress towards urban sustainability. Clearly, a national program of indicators would be more desirable as this would allow grantmakers to assess local progress using a standard set of metrics. In the US, the Star Community Index is now being rolled out by ICLEI-Local Governments for Sustainability.²⁴⁶ The 81 goals and 10 guiding principles collectively define community-scale sustainability.

In Canada, a monitoring program on the national scale is Vital Signs, an annual check-up conducted by community foundations across Canada, coordinated nationally by Community Foundations of Canada. Community foundations are well-suited to this kind of work because of the broad role they play in their communities. Community foundations work with a wide range of community groups – not just one charity or sector. The result is a comprehensive view of local issues and the ability to make connections between various needs and issues. Each local report measures urban vitality, identifies significant trends, and assigns grades in at least ten areas critical to quality of life.²⁴⁷ Each city's report card data is a compilation of numerous research sources, some national but much of it local, that help communities make connections between issues and trends in different areas. Vital Signs is based on a project of the Toronto Community Foundation, which was scaled up to the national level with financial assistance from the McConnell Foundation.

Convene stakeholders

Urban sustainability issues are complex and often require collaboration among a wide range of stakeholders in order to be effectively addressed. Building a local food system, for example, can involve actors from the local food movement, social justice groups, academics, city government, large institutional buyers such as hospitals and universities, farm operators, distributors and so on. Regrettably, stakeholders in urban sustainability issues are often atomized and working in isolation. From their vantage point, funders can often see the various interests involved and the potential for greater collaboration. Furthermore, funders have the social capital needed to convene stakeholders from diverse fields of interest as they are often seen as working in the public interest with no apparent axe to grind.

²⁴⁶ www.iclei.org/index.php?id=1487&ctx_ttnews%5Btt_news%5D=4560&ctx_ttnews%5BbackPid%5D=983&cHash=35a9fe2578

²⁴⁷ www.cfc-fcc.ca/programs/vital-signs.html

Convening involves bringing people together around a common concern and helping them design appropriate strategies and solutions.²⁴⁸ It can be helpful for reviewing progress, clarifying goals, pinpointing barriers to change, setting priorities, and identifying key levers that must be pulled (such as getting specific municipal policies changed or persuading key people to come on board) in order to move the agenda forward. Convening can be done on a regional or national basis, depending on the scope of the problem to be solved. Convening can be as simple as a single meeting or it can be an ongoing effort that involves continuous formal or informal meetings, workshops, reports and so on. The goal may be as modest as to increase awareness of a problem or it may be as ambitious as creating new policy that solves the problem.

Foundation-led convening can help develop greater understanding of urban sustainability issues within both the foundation and the groups convened. The close relationships that develop between the foundations and groups convened can help the foundation identify the groups they want to invest in on a longer-term basis, which can lead to the emergence of more effective actors in this field. Where several foundations are involved in the convening initiative, funders may collaborate in their grantmaking decisions related to the issue in order to increase effectiveness and reduce duplication. Convening can also result in greater collaboration among grantees and joint applications that will have greater impacts than isolated efforts. While convening is not necessarily or primarily about grantmaking, it can have beneficial implications for both grantmakers and grantees.

A good example of a Canadian foundation initiating a major convening effort in issues related to urban sustainability is the Metcalf Foundation's Sustain Ontario initiative. Sustain Ontario is a province-wide, cross-sectoral alliance that promotes healthy food and local sustainable agriculture.²⁴⁹ The organization aims to achieve systemic change by bringing together stakeholders to work on various research, policy and action initiatives. For example, one working group is exploring local food policy while another is looking at local food provisioning for hospitals, schools, and universities. The organization was the outcome of a two-year process led by the Metcalf Foundation that brought together health, community, farming, and environment groups and organizations working on food and agriculture issues in Southern Ontario. Through the process facilitated by the Metcalf Foundation, participants identified a need for collaborative policy and advocacy work at the provincial level. Sustain Ontario was set up with funding from the Foundation in 2009 and subsequently hired its first director. The 21 groups that were involved at the start of the process have mushroomed to 250 groups. Metcalf maintains an

²⁴⁸ Tamarack has published a primer on convening for poverty reduction that contains many insights applicable to the urban sustainability field. Available at: vibrantcanada.ca/files/multi_sector_effort_to_reduce_poverty_primer.pdf

²⁴⁹ sustainontario.com



advisory role but is gradually withdrawing its financial support as the alliance becomes more self-sustaining.

Build the knowledge base

We have observed above that getting the facts straight is an important precursor to effective action, whether by nonprofits or government agencies. Urban sustainability is a field with many unanswered scientific and policy questions that desperately need additional resources for research. Philanthropic funders have an important role to play in this respect. They are widely perceived to be neutral and relatively disinterested (because they don't have direct economic stakes) in what are otherwise controversial issues. This gives their research products more credibility than if conducted by most other stakeholders in social change. Foundations are also more nimble than university-based research, where scholars must compete for funds from bureaucratic agencies characterized by long approval times and a lack of interest in applied issues. Also, foundations have resources to follow up research studies with knowledge dissemination activities such as workshops, conferences, and public presentations. Finally, the relative penury of government-sponsored research in many areas related to urban sustainability makes foundation involvement even more crucial than for other important issues.

An excellent example of a foundation that has contributed greatly to our understanding of urban sustainability issues is the Neptis Foundation in Toronto.²⁵⁰ Neptis commissions or directly undertakes studies that will shed light on the structure and growth of urban regions, especially the Greater Golden Horseshoe area and in particular, its built environments and landscapes. The scholarly work that Neptis undertakes is directly related to important policy questions of the day and makes a direct contribution to the understanding of key issues involved. The work does not duplicate that of government or university researchers but aims to fill voids in regional knowledge by responding quickly to shifting public policy debates. In the early 2000s, for example, the issue of regional governance and growth management in the Toronto area was coming back onto the table after being avoided for many years. Neptis commissioned a number of studies on growth scenarios, showing how the region would evolve without major policy interventions. The bleak scenario that was constructed was instrumental in spurring further interest in this question and ultimately, government action. When the movement to establish a greenbelt in southern Ontario gained momentum, Neptis commissioned a number of studies on the current state of greenlands in the region and the options for a greenbelt. Their research greatly strengthened the hands of other foundations and NGOs that were lobbying for the creation of the greenbelt, and played an important role in the success of this movement. The foundation

Urban sustainability is a field with many unanswered scientific and policy questions that desperately need additional resources for research.

²⁵⁰ www.neptis.org

is now doing research that can help build public support for public transportation and a progressive regional transportation plan.

Scale up local projects

Across the country, non-profit organizations are experimenting with innovative approaches to local issues, whether it be cleaning up a river, greening a school playground, or promoting active transportation in a given neighbourhood. These projects often produce positive local outcomes but rarely have the capacity to significantly increase their reach or to influence the “upstream” causes of the original challenge. Scaling them to a regional or national level can bring tried and true solutions to other communities facing similar challenges.

Scaling up a project can be tricky. Not all local solutions will have purchase at a broader scale and local groups may lack the skills or resources they need to grow quickly. Foundations can help with efforts to scale up projects by working with promising local groups to identify broader opportunities, providing direct funding for program expansion and capacity building within the organization, and linking the organization to broader networks that will facilitate program expansion. An example is provided by The Stop Community Food Center in Toronto (see description of the program in Chapter 2). In 2009, staff at the Centre wrote a Metcalf Solutions paper that laid out The Stop’s food centre model, and proposed a way to bring that model to other communities.²⁶⁹ Work is now underway to bring The Stop model to 15 communities across Canada. Two pilot food hubs have already been opened in Perth (ON) and in Stratford (ON). The momentum generated by the pilots led to the creation of Community Food Centres Canada in 2012, a national organization with a mandate to work with partners to develop the Community Food Centre model across the country.²⁷⁰ Foundation supporters to date include Metcalf, McConnell, Ontario Trillium, Sprott and Green Shield Canada.

Influence larger systems

Achieving significant impact may rely on broader approaches than simply replicating a successful program model on a wider scale. Foundations are increasingly interested in broader strategies that mobilize a range of assets and relationships to address complex sustainability challenges.

Working closely with the Social Innovation Generation²⁷¹(SiG) network, the McConnell Foundation supports community organizations to redesign business models, to mobilize research to influence policy, and to collaborate effectively with other sectors. One example of this approach is its Sustainable Food Systems²⁷² initiative. The initiative supports the scaling of sustainable

²⁶⁹ metcalffoundation.com/wp-content/uploads/2011/05/in-every-community.pdf

²⁷⁰ www.cfccanada.ca

²⁷¹ sigeneration.ca

²⁷² www.mcconnellfoundation.ca/en/programs/sustainable-food-systems



food projects across the food system, including community seed banks, new farm incubators, seafood traceability, local food certification, and farm to cafeteria work in schools, universities and hospitals.

Regional ‘value chain’ projects are also funded to map their local food systems and develop market-based projects such as food hubs which aggregate, process, distribute and/or market regional products using values of sustainability and equity. Peer exchange, training and coaching are used to accelerate learning and development.

A ‘backbone organization’, Food Secure Canada,²⁷³ works to convene food grantees and other organizations in learning networks, while increasing their communications and public policy capacity. The McConnell Foundation also stimulates collaboration between the public, private and community sector on problems which are ‘stuck’. In collaboration with other funders including the Metcalf and Greenbelt Foundations, research is being commissioned on the social, environmental and economic impact of local food. Finally, the McConnell Foundation invests in social finance instruments, which provide loans or grants to sustainable food businesses.

Invest assets

Most foundations in Canada have invested their assets into the equities market with no particular mission except to meet their fiduciary responsibilities, i.e., to maximize returns and protect the foundation’s capital. However, there is increasing interest in “impact investment”, or using a foundation’s assets to meet not only the financial stability of the organization, but also its environmental and social mission. There are a number of emerging possibilities.

One modality of impact investment is the use of the foundation’s equity in an infrastructure or development project that contributes to urban sustainability. This is more common in the US, where large foundations have been known to invest directly in community revitalization. For example, the Lyndhurst Foundation²⁵¹ in Chattanooga relocated its own office and followed up with mission-related investment (public/private partnerships) to restore the waterfront and build a park and aquarium. Working with the Riverfront Partnership, a coalition of business groups, NGOs and the city, the foundation’s investments helped transform the waterfront area of the city. To take another US example, the McCune Foundation in Albuquerque²⁵² invested 10% of its assets in creating a real estate corporation, which bought and refurbished a theatre, invested in new condos and rebuilt a former high school into high-end lofts. All of these actions were linked to a downtown revitalization initiative that included the reopening of a railway station. Few foundations in Canada wish to be in the business of directly funding urban infrastructure or

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273 foodsecurecanada.org

251 www.lyndhurstfoundation.org

252 www.nmmccune.org

major real estate initiatives, but more modest investments can have a significant impact. In Montreal, the McConnell Foundation invested (along with governments and private sector sponsors) in the Maison du développement durable, which houses major environmental groups and provides programming on sustainable development.

Another possibility is investment in green equity funds. New products like Greenchip Financial²⁵³ are becoming available for foundations to invest in. Greenchip was founded in 2007 to manage portfolios of publicly listed companies operating globally in the environmental economy, including alternative energy, water, sustainable agriculture and clean technology sectors. It uses a research-driven approach to invest in companies that have solid business and sustainability fundamentals. Investeco is another firm that provides interesting mission-related investment opportunities, including the Investeco Sustainable Food Fund. Many foundations in Canada are tracking the field and are interested in hearing about new products and services.

A third option is for funders to invest their capital in initiatives linked to urban sustainability through a mechanism such as the SVX.²⁵⁴ The SVX will be a platform that will attract and pool funds from impact investors interested in investing in ventures that have demonstrable social and/or environmental impacts, including nonprofits, co-operatives, and for-profit corporations. The project is an initiative of Social Innovation Generation (see above) in collaboration with TMX Group Inc., and supported by the Government of Ontario, Torys LLP, Causeway Social Finance, Imagine Canada, and many other partners. The SVX will provide an online market platform with venture listings, impact fund listings, and a resource centre to facilitate effective impact investments (e.g., by doing the due diligence on organizations that are trying to raise capital and ensuring that the environmental and social bottom line is rigorous). The SVX has not yet launched but during its first year, it hopes to list at least 50 social ventures and attract at least \$1 million in new capital for investment into 10 ventures, with a scale of investment expected to be from \$50K to \$10 million.

A fourth strategy in terms of impact investing is to invest in the creation of new social enterprises, organizations that combine a social/environmental mission with a business venture. These organizations help to harness free market forces in favour of social change and experience with them suggests that they are often more successful than traditional nonprofits in scaling up their activities rapidly and sustainably.

Vancouver City Savings Credit Union (Vancity) is an excellent example of good practice in this regard. The Credit Union is trying to grow the social enterprise sector in Vancouver and elsewhere, especially through its Resilient Capital Fund. This fund, which may grow to be as large as \$15 million, at-

²⁵³ www.greenchipfinancial.com

²⁵⁴ thesvx.org



Toronto Atmospheric Fund (TAF)

TAF has become a leader in impact investing. TAF was created in 1991 with an endowment provided by the City of Toronto. Its mandate is to help the City achieve its community-wide greenhouse gas emission reduction targets: a 30 percent reduction by 2020 and an 80 percent reduction by 2050 (below 1990 levels), largely by funding projects to improve building energy efficiency. Initially functioning as a traditional foundation, TAF's approach gradually evolved to allow more of its endowment to be deployed towards the organization's mandate. Three-quarters of TAF's \$23 million endowment fund is now deployed in impact investments (one-quarter is in conventional bonds for diversification and liquidity purposes). TAF's \$7 million equity investments are now with Generation Investment Management (US-based) and Greenchip Financial Corp (Toronto-based). In addition, \$8 million of TAF's overall endowment is available for direct investments in local projects that yield a triple bottom line: market rate of return, GHG emission reduction, and creation of opportunities for market transformation. For example, TAF has provided loans for construction of energy efficient condominiums, energy efficiency retrofits of high-rise and institutional buildings, installation of solar hot water "utility" systems, renewable energy facilities, plus several emerging technologies focused on energy



efficiency. An example of the latter is LightSavers Canada, which TAF helped to create in 2008, and is today a market consortium with the aim of accelerating the adoption of LED street lighting in cities across the country (and looking for further investments).²⁵⁶ A key aspect of TAF's investment decisions is the potential to mobilize private and public capital and bring it into the energy-efficiency sector. By piloting, de-risking and demonstrating new financing tools, TAF aims to clear obstacles to implementing low-carbon solutions while also creating a lucrative investment opportunity for investors. Currently, TAF is working to leverage its own \$2 million investments to build a social venture with at least \$50M to be invested in approximately 100-150 energy efficiency retrofits in the multi-unit residential, institutional and commercial sectors.

Lucio Mesquita

tracts impact investments from other lenders and foundations (such as the Vancouver Foundation, which has put \$1.7 million into the fund) and uses the capital to make low-interest, high-risk loans to help social enterprises get off the ground or scale up their activities. An example of a successful investment is SOLE Food.²⁵⁵ This initiative started as a traditional nonprofit, but is now a social enterprise that provides urban agriculture employment and train-

²⁵⁵ sole.wordpress.com/about-solefood/about

²⁵⁶ www.lightsavers.ca

ing opportunities for Vancouver’s inner-city residents. Neighbourhood residents are trained and employed to install and manage small production farms on leased urban lots, often in transition spaces like underused parking lots. Produce grown from the farms is sold to restaurants, at farmers’ markets and distributed to community organizations. The organization is in the process of expanding to include a network of farms throughout the city that will help revitalize neighbourhoods, provide meaningful employment to individuals with multiple challenges, supply fresh food to inner city residents, and present a successful self-supporting model of high quality innovative agriculture within the urban context. The Resilient Capital Fund provided startup capital and a line of credit to get the operation running. Profits from the operation are expected to pay back the loans.

Help municipalities innovate

Many of the initiatives reviewed in the first part of this paper showed that municipalities and philanthropic funders can work together for mutual advantage and to push the urban sustainability agenda forward in their region. Municipalities have much more money to spend but most spending is pre-programmed, and many municipalities are risk-averse in their corporate culture. Spending money on new initiatives outside the municipality’s “core mandate” is often frowned upon by council. This can make it difficult for municipal officials to champion new initiatives and to obtain the resources needed in order to launch a new program. Funders are more nimble than municipal governments, are more open to new ideas and new programs, and can take more risks. If foundations can step up with modest funding for initial stages of a new program, it may provide the momentum that municipal champions need to wrestle new funds from city council or obtain outside financing (e.g., from FCM) in order to scale up the program. In other cases, funders may support a municipal planning initiative that affects how the municipality does business over many years. For instance, a strategic climate change mitigation plan funded through a philanthropic grant can have major impacts on municipal procurement, planning, and investment decisions over the life of the plan.

Another possibility is that a national grantmaking organization creates an incentive for municipalities to work directly with local partners on urban sustainability initiatives. This is the case in the US with the Local Sustainability Matching Fund, a partnership between the Urban Sustainability Directors Network and the Funders’ Network for Smart Growth and Livable Communities (see Box). This could serve as a model for a Canadian organization, for example, Community Foundations of Canada. Alternatively, Canadian funders interested in this model could join the Funders’ Network in the US and their contributions could be earmarked for Canadian projects.



The Local Sustainability Matching Fund, USA

In partnership with the Urban Sustainability Directors Network, the Funders' Network for Smart Growth and Livable Communities created the Local Sustainability Matching Fund in 2011. The Fund was created with support from four Network members: the Kendeda Fund, the New York Community Trust, the Summit Foundation, and the Surdna Foundation. The purpose of the Fund is twofold: to catalyze partnerships between local government sustainability directors and local, place-based foundations, including community foundations, and to advance



important community-based sustainability initiatives.²⁵⁸ The Fund provides partnership investments between \$25,000 and \$75,000, with a 1:1 match required by one or more local foundations. In round one, five awards were given for a total of \$500,000 (e.g., in Salt Lake City, \$25,000 went to fund Clean Air Neighborhoods, a neighborhood-based social marketing campaign to help individuals negotiate barriers to alternative transportation.²⁵⁹) Round two is currently in progress. The response to round one was overwhelming: the Network hosted a conference call to provide more information on the fund and review the selection criteria and over 500 signed on and 35 full proposals were received. A selection committee comprised of foundation representatives and urban sustainability directors makes the selection decisions.

Community Foundation of the Fox Valley Region

Collaborate with other funders

There is strong support among funders in this sector for greater collaboration and coordination among themselves. This has been discussed in informal forums across the country, but as yet, no formal plans have emerged.²⁶⁰ At present there is some sporadic communication among funders (largely due to the fact that grantees are applying to more than one grantmaker), but most funders active in the sector work in relative isolation. A collaborative network could play some or all of the following roles:

- **Create an urban sustainability strategy:** Collaborating funders may be able to produce an urban sustainability strategy that recognizes a common fact base, identifies funding priorities, identifies the main opportunities for intervention, and lays out what defines success.

²⁵⁸ The model for the fund was Baltimore, where a community foundation is funding a food policy coordinator at city hall.

²⁵⁹ Information on the winners of round one can be obtained at: www.fundersnetwork.org/participate/green-building/local-sustainability-matching-fund/lsmf-may-2012-awards

²⁶⁰ The so-called Montebello is an informal conversation among a small group of Ontario, Quebec and occasionally US environmental funders. It is an elastic group without structure or leadership, and at its last meeting included a western Canadian foundation that subsequently hosted a meeting in Banff with some involvement from the original group along with other western foundations.

- **Coordinate funding efforts:** One way of approaching the complexity of urban sustainability and finding entry points for interested funders would be for funders to work together to disentangle the various threads involved and each assume responsibility for specific strands.
- **Identify projects for shared participation:** Although pooling money into a unified fund is unlikely (as funders each have their individual mandates and procedures), joint funding of projects may be possible.
- **Send clear signals to the grantee community:** Members of a funders' network can work together to clarify signals to the grantee community as to what the main priorities are for the network and perhaps even share a format for RFPs.
- **Share knowledge:** Funders are constantly gaining new insights into strategies that work and don't work, emerging issues, promising groups, and so on but have few formal mechanisms to share this information with other. As a growing field that includes some seasoned players as well as relative newcomers, it is important that funders share knowledge to help each other avoid common pitfalls and reinventing the wheel. Participating in a collaborative network is a good way to enhance social learning and improve the overall effectiveness of grantmaking in this sector.
- **Build social bonds among funders:** One aspect of grantmaking that is sometimes overlooked is the importance of strong social relationships among the grantmakers themselves. Networking can help build trust among the players, which can facilitate further collaboration.
- **Growing the number of funders in the sector:** A network may facilitate entry into the sector and increase the number of funders willing to become involved.

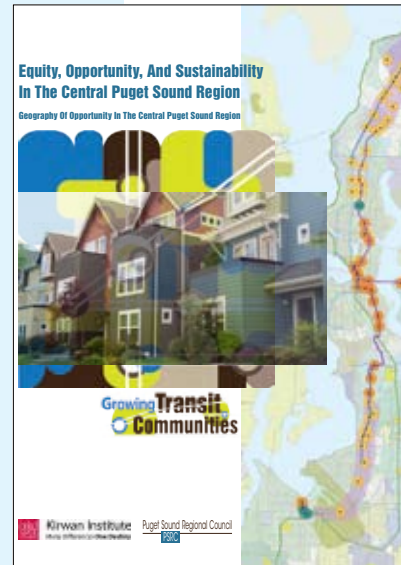
There appears to be interest in collaborating on two geographical levels, regional and national:

- **Regional collaboration:** Many of the issues related to urban sustainability are regional in nature and lend themselves to regional solutions, such as urban sprawl, the transport system, greenbelts, and local food systems. Collaborating at this scale can help improve the effectiveness and efficiency of grantmaking in the region by allowing funders to disentangle the concept of urban sustainability, with different funders concentrating on different pieces of the puzzle. This approach would maximize the impact of funders with limited resources who need to focus their interventions on a limited number of issues and at a limited scale. Many funders have regional mandates but national organizations can also be involved in regional collaborative efforts. The Puget Sound Funders Partnership for Sustainable Communities is a good example of regional funder collaboration in the US (see Box).



The Puget Sound Funders Partnership for Sustainable Communities

The Partnership is a funders' collaborative focused on transit-oriented development (TOD) in the metropolitan region of Seattle. The Partnership has 15 member organizations including corporate, family and community foundations. The City of Seattle and Puget Sound Regional Council are also members of the partnership. The formation of the Partnership was triggered by the decision taken by the Puget Sound Regional Council to invest in a new \$15 billion LRT line and a federal grant of \$5 million to help the Council plan and create "vibrant, diverse, and inclusive communities for all" in the station areas along the line.²⁶¹ The purpose of the Partnership is to align grantmaking decisions among the partners for more impact and to dovetail grantmaking with the planning efforts by the City and Regional Council. It is a learning community that will jointly strategize and do research to learn about high priority funding opportunities that target areas around transit stations. Funders will coordinate their grantmaking and investment decisions and likely enter into shared funding initiatives, based on a common vision: "a region where everyone participates and prospers, and the natural environment we cherish is nurtured and replenished." The group will use an "opportunity map" to aid in making investment decisions across the region.²⁶² The Partnership has set up three working groups: 1) community engagement to ensure that community of colour groups influence TOD projects 2) a data analysis group to determine where there are gaps in funding related to TOD and 3) a work group looking at developing a capital fund for green affordable housing in TOD areas. This work will be funded through grants or mission/program-related investments. The administrative work of the Partnership is carried out by a staff person whose position is funded jointly by the main partners.



- **National collaboration:** Collaboration among funders could also be beneficial at the national scale not only because many of the problems related to urban sustainability faced across the country are similar but also because some urban sustainability initiatives may best be carried out at the national scale. Different national models are available. The Funders' Network for Smart Growth and Livable Communities,²⁶³ created in 1999, is a US model that provides an idea of how far collaboration on the national scale can go (see Box). Setting up such a comprehensive organization among urban sustainability funders in Canada is probably not feasible due to the smaller number of funders involved in this issue and the smaller asset bases. However, a more modest network that organizes meetings among funders (with, for instance, guest speakers on recommended strategies within this field), sets up electronic vehicles for communication and

²⁶¹ See: psrc.org/growth/growing-transit-communities

²⁶² Opportunity maps are based on variables indicative of high and low opportunity. Indicators can be either impediments to opportunity (e.g., high neighborhood poverty) or conduits to opportunity (which are analyzed as positive factors, e.g., an abundance of jobs). These multiple indicators of opportunity are then assessed at the same geographic scale, enabling the production of a comprehensive opportunity map for the region. See: psrc.org/assets/7831/EquOppSusReport2.pdf.

²⁶³ See: www.fundersnetwork.org

knowledge sharing (such as a listserv, blog pages on specific issues, webinars), and provides limited technical support for members might be possible. Such a network could be set up as an independent organization, as a subgroup within CEGN (which already coordinates subgroups on energy and water that work through webinars and occasional meetings), or as a “regional” working group within the Funders’ Network.²⁶⁴ Whatever format is chosen, a national network can only be successful if there are enough interested partners and one or two dedicated members to provide the driving force for the network. Setting up a “challenge fund” with dedicated money from the main partner(s) would be a good way to raise money from other members for such a network.

The Funders’ Network for Smart Growth and Livable Communities

The Funders’ Network has 145 member organizations (143 US and two Canadian: Neptis and the Vancouver Foundation) including national but mostly regional funders (i.e., community foundations). The Network has four areas of business: 1) general services, including the organization of an annual meeting, technical resources for members, and a monthly newsletter



2) consulting type services to members interested in specific issues 3) support for working groups made up of member organizations, and 4) new leadership development, including a fellowship program and a research and development fund to look into interesting issues that have the potential for a major impact in the field. The Network has 10 staff members in offices in several cities

across the country (Boston, Washington, Denver, Twin Cities, Oakland, and Miami) and supports eight working groups. Five of those groups have a geographical focus: CA, North West, Mississippi Corridor, the Tristate region, and Metro Denver. Three groups have an issue focus: restoring prosperity in older industrial cities, green building and green neighbourhoods, and transportation reform. Working groups generally meet twice a year, collaborate on funding projects, and do learning calls and field trips. Each working group has a staff person paid for through the Network. Four members of the green building and green neighbourhoods working group recently capitalized a new fund called Local Sustainability Matching Fund (see Box).

²⁶⁴ The Funders’ Network may be able to provide a staff person to help organize a regional network under its umbrella and has offered to come to Toronto to discuss the possibilities with CEGN or a subset of interested grantmakers.



Create a national organization to promote urban sustainability

At present there is no single organization operating at the national level with a broad mandate to promote urban sustainability in Canada. Given that the federal government is not constitutionally or politically equipped to play a leadership role, there is some interest among funders, academics and NGOs for some kind of national organization that would raise awareness of urban sustainability issues, undertake research, do advocacy among federal and provincial governments, and set out an ambitious agenda for moving cities in a more sustainable direction. The organization could help position urban centres in Canada as a basis for a healthy future, advocate for greater funding for public transit and housing from senior governments, undertake research on getting the fiscal signals aligned with sustainability goals, institute awards from the most innovative work and progress on urban sustainability, and work with regional partners to help strengthen sustainability initiatives across the country. The organization could include nationally recognized academics, senior policy advisors, business leaders, NGOs, mayors or planning directors, and presidents of major foundations. Foundation funding for the organization would help ensure its independence and credibility. If there is not enough appetite for a new organization, an interim strategy could be to fund some of the needed activity through existing organizations, such as the Canadian Urban Institute or FCM.

Create a network of cities to promote urban sustainability

An alternative approach to a “grass tops” national institution would be a more grass roots approach that networks people in cities committed to urban sustainability. Foundations committed to urban sustainability could take a leading role in setting up such a network in order to facilitate knowledge transfer, communication, joint projects, and so on. There are a number of models this could follow. One is the Urban Sustainability Directors Network in the US, which networks 111 municipal sustainability directors in the US and Canada (see Box). The ten sustainability directors in Canada who belong to the USDN could form the nucleus of a wider network of senior municipal managers involved in sustainability work.

Another possible model is offered by the Tamarack Institute for Community Engagement.²⁶⁵ With funding from McConnell and Maytree Foundations, this nonprofit organization is putting together a network of up to 20 Canadian cities on poverty reduction issues. The network is recruiting people involved in social services, labour, business, and (to a limited extent) municipal government with the aim of encouraging municipalities, businesses

²⁶⁵ Tamarack describes itself as an Institute dedicated to the art and science of community engagement and collaborative leadership. See tamarackcommunity.ca.

and other local institutions to implement poverty reduction strategies. Organized as a “community of practice”,²⁶⁶ members will exchange information, experiences, and best practices related to their work in the poverty reduction field. A community of practice on urban sustainability issues could include local nonprofit groups, labour and business representatives, urban planners, and program officers from regional foundations, among others. It could be organized as an independent initiative or piggy-backed on an existing organization, such as Community Foundations of Canada.

A third possibility would be to work with Sustainable Cities International, based in Vancouver.²⁶⁷ It is supported by contributions from the private and public sectors, international agencies, and foundations (including the Vancouver Foundation). It already networks 40 cities around the world to catalyze action on urban sustainability through research, conferences and sharing of experiences and best practices. Almost half these cities are in Canada and the organization may be interested in discussing how it can expand its network in Canada.

Urban Sustainability Directors Network, USA

The Urban Sustainability Directors Network²⁶⁸ (USDN) was created in 2009 when 65 sustainability directors from cities and counties in the US and Canada came together for its first gathering in Chicago. Funded by the Surdna Foundation, the Home Depot Foundation, Rockefeller Brothers Fund, and the Blackstone Ranch Institute, the USDN was formed to enable public sector sustainability leaders to learn from each other and accelerate achievement of ambitious city sustainability goals. Over the last decade a committed cadre of local government leaders has burgeoned, but they have worked in isolation of each other, often tackling similar issues as their peers across the country without a national network to share experiences and partner. The USDN is a peer-to-peer professional network that brings these senior officials together to share experiences, exchange information and collaborate to more quickly develop and share solutions that improve the natural and built environment, infrastructure, economy, health, and resilience of local communities. The Network launched the Urban Sustainability Innovation Fund in 2009, a pooled fund (from Summit, Surdna, Home Depot, and Mertz Gillmore Foundations so far) that encourages municipalities to collaborate on finding solutions to common problems. The USDN meets once a year and carries on its work through electronic means. The organization has a full-time coordinator. A Canadian participant, Sadhu Johnston, Deputy Manager, City of Vancouver is the co-chair of the Network.



²⁶⁶ For Tamarack’s description of a community of practice, see: tamarackcommunity.ca/g2_CofP.html

²⁶⁷ www.sustainablecities.net

²⁶⁸ usdn.org/home.html?returnUrl=%2findex.html



Afterword

This overview of urban sustainability issues and the role for philanthropy in addressing them was not intended to be comprehensive and many excellent initiatives will not have been reflected in the foregoing pages. We are keen to hear from readers about initiatives where philanthropy has played a particularly catalytic role in addressing urban sustainability concerns and/or those initiatives that demonstrate how the nonprofit community (funders and nonprofits alike) are working in productive partnerships with municipal governments to address these issues. Please relay these to CEGN's Executive Director, Pegi Dover at: pegi_dover@cegn.org.

CEGN is eager to use this brief to encourage strategic philanthropy in the area of urban sustainability. Funders who are interested in finding ways to work together to promote more sustainable cities in Canada are also encouraged to signal their interest to CEGN, as the network explores its own role in spurring funder collaboration in this area. The many recommendations contained in the brief offer starting points for some of these conversations. Building a bridge between the work of the nonprofit community and that of municipal governments working to address urban sustainability challenges is a priority, especially during a time of constrained resources, and ideas from readers on how best to forge these connections are also welcome.

For more information about CEGN, visit: www.cegn.org

About the author

Ray Tomalty is Principal of Smart Cities Research Services, a research consultancy that specializes in urban sustainability, including growth management, active transportation, green infrastructure, community energy planning, housing affordability, fiscal issues, and urban governance. He is an Adjunct Professor at McGill University's School of Urban Planning, where he teaches courses on sustainable cities. He has a Ph.D. in urban planning from the University of Waterloo, a Master's in public administration from Queen's University in Kingston, and two undergraduate degrees, also from Queen's, in Life Sciences and Political Studies.



Appendix A

Funders Involved in Urban Sustainability Issues

Few philanthropic organizations in Canada would claim to have an urban sustainability program per se, (i.e., a long-term funding stream dedicated to this topic). However, many funders have made grants or investments in areas that are linked to urban sustainability or have funding programs in one or more of the fields relating to urban sustainability. The following highlights some of the funders that are currently working in this area in Canada.

The Alberta Ecotrust Foundation: The Foundation recently expanded its priorities to include land use and energy initiatives. Support is directed to environmental nonprofits in Alberta. For more information, visit: www.albertaecotrust.com

The Alberta Real Estate Foundation: The Foundation's Land Stewardship & Environment program is designed to enable Albertans to understand and respond to changing land use patterns, growth pressures, air and water management issues and to enhance the ecological quality of their communities. For more information, visit: www.aref.ab.ca

The BC Real Estate Foundation: The Foundation's mission is "to transform land use attitudes and practices through innovation, stewardship, and learning." Grantmaking is focused in fields related to the built environment, especially land use policy, planning, regulatory, and design practices. The Foundation is also involved in freshwater issues and sustainable food systems. For more information, visit: www.refbc.com/about

Bullitt Foundation: While based in the U.S., the Bullitt Foundation does support work in the southwest of British Columbia. The Foundation's Urban Ecology program is designed to advance policies and practices to create vibrant, affordable, diverse, healthy, and environmentally beneficial communities. For more information, visit: bullitt.org/urban-ecology

Calgary Foundation: The Foundation works to create a community where citizens are engaged in community building at all levels and a city that is healthy and vibrant. The Foundations supports many initiatives in the area of urban sustainability. For more information, visit: www.thecalgaryfoundation.org

Carthy Foundation: Based in Calgary, the Foundation has an Urban Ecology & Ecological Design grant program which targets initiatives that support optimal ecological function within urban settings. This includes projects that investigate and promote innovations in areas such as urban environmental policy, habitat and connectivity and sustainable urban design. For more information, visit: Carthyfoundation.org/index.htm

The Lucie et André Chagnon Foundation: Based in Quebec, the Foundation's mission is to prevent poverty. A key approach for doing so is mobilizing communities. The Foundation often works in partnership with the Government of Quebec. For more information, visit: www.fondationchagnon.org

Friends of the Greenbelt Foundation: Based in Toronto, the Foundation's focus is on the 1.8 million acres of greenbelt that is the largest such area in the world. The Foundation supports initiatives that "keep farmers successful, strengthen local economies and protect and grow natural features". For more information: www.greenbelt.ca

The George Cedric Metcalf Charitable Foundation: The Metcalf Foundation has held an overall foundation-wide sustainability perspective on funding for the past decade, supporting work in three main areas: the performing arts, the environment and social justice. Metcalf has also been a long term supporter of local sustainable food and agriculture systems in southern Ontario through its Healthy Lands program and its involvement in the development and implementation of the Greenbelt in the Greater Toronto Area. More recently, Metcalf has moved more deliberately to support environmental work that strengthens the integrity of the the natural environment in tandem with a successful economy that allows individuals to flourish and communities to thrive. www.metcalffoundation.com

The Green Municipal Fund (GMF): The Government of Canada endowed the Federation of Canadian Municipalities with \$550 million to create the GMF. Through the Fund, support is directed to municipal governments and their partners for municipal environmental projects. For more information, visit: www.fcm.ca/home/programs/green-municipal-fund.htm

The J.W. McConnell Family Foundation: The foundation has had a number of granting streams relevant to urban sustainability, including Sustainable Food Systems, Vibrant Communities, and Green Street. In addition to making grants to a range of community-based environmental organizations (The Natural Step, Evergreen, Equiterre), the foundation has supported efforts to increase collaboration within the sector. For more information, visit: www.mcconnellfoundation.ca



The Neptis Foundation: The Foundation conducts and publishes nonpartisan research on the past, present and future of urban regions. To date, its focus has been primarily on Toronto. For more information, visit: www.neptis.org

Ontario Trillium Foundation: The new environmental priorities of the Ontario Trillium Foundation are very relevant to urban sustainability work. The priorities include building the capacity of communities to develop local and sustainable food system; Supporting innovative initiatives that protect and build green infrastructure; and reducing GHG emissions and increasing energy conservation. For more information, visit: www.otf.ca

TD Friends of the Environment: TD Friends of the Environment Foundation is the title sponsor of TD Green Streets – a national program that supports innovative practices in municipal forestry. The Foundation also supports a range of local community projects, many of which have a direct impact on urban sustainability. For more information, visit: www.fef.td.com

Toronto Atmospheric Fund: The City of Toronto established Toronto Atmospheric Fund in 1991 to focus on reducing local greenhouse gas and air pollution emissions. Working with a \$23 million endowment from the sale of a city property, TAF deploys three programs — Incubating Climate Solutions, Mobilizing Financial Capital, and Mobilizing Social Capital — to address Toronto’s major emissions sources: buildings and transportation. For more information, visit: www.toronto.ca/taf

The Toronto Community Foundation: The Foundation is dedicated to “city building” and does this through a number of avenues, including through the Vital Toronto Fund. For more information, visit: www.tcf.ca

Vancity: Vancity supports urban sustainability initiatives both through its lending and its philanthropic donations. As a grantmaker, Vancity directs its support to a wide range of community initiatives, including local food projects and green building grants. For more information, visit: www.vancity.com/MyCommunity/OurVision

The Vancouver Foundation: The Foundation has created the Greenest City Fund – a four-year, \$2 million fund that is supporting community-led green projects. This Fund supports the goal to make Vancouver the greenest city by 2020 – a joint initiative of the Foundation and the City of Vancouver. For more information, visit: vancouverfoundation.ca/greenestcityfund/generationgreengrants

The W. Garfield Weston Foundation: The Foundation is a leader in private land conservation in Canada. Recently, the Foundation announced a three-year program to fund innovative park initiatives across the City of Toronto. For more information, visit: www.westonfoundation.org

Interviewees

Name	Title	Organization
Full interviews		
Janice Astbury	Consultant	
Rotem Ayalon	Conseillère en alimentation et en aménagement	Québec en forme
Andrew Bowerbank	Board Member	FCM - Green Municipal Fund
Alan Broadbent	CEO	Maytree Foundation
Mark Butler	Policy Director	Ecology Action Centre
Lindsay Cole	Associate Member	Sustainability Group
Patrick Condon	Professor	UBC SALA
Tony Coombes	Executive Director	Neptis Foundation
Ann Dale	Professor	School of Environment and Sustainability, Royal Roads University
Robert Gibson	Professor	University of Waterloo
Mark Gifford	Director, Grants and Community Initiatives	Vancouver Foundation
Brent Gilmour	Executive Director	QUEST
Jill Grant	Professor	Dalhousie University
Mike Harcourt	Executive Director	Institute for Sustainable Cities
Cheeying Ho	Executive Director	Whistler Centre for Sustainability
Sandy Houston	President	Metcalf Foundation
Stephen Huddart	President and CEO	McConnell Foundation
Sadhu Johnston	Deputy City Manager	City of Vancouver
Mike Kennedy	CEO and President	Green Analytics
Noel Keough	Assistant Professor	Faculty of Environmental Design, University of Calgary
Bruce Lourie	President	Ivey Foundation
Danny Pearl	Associate Professor	Université de Montréal
Steven Peck	Executive Director	Green Roofs for Healthy Cities
Gil Penalosa	Executive Director	Cities 8-80
Mary Pickering	Vice President, Programs and Partnerships	Toronto Atmospheric Fund



Name	Title	Organization
Luc Rabouin	Executive Director	Urban Ecology Centre
Wayne Roberts	Formerly Manager	Toronto Food Policy Council
Neelima Shah	Program Officer	Bullitt Foundation
Stephanie Shewchuk	Policy Analyst	Canada West Foundation
Ben Starrett	Executive Director	Funders Network for Sustainability (US)
Shawna Stirrett	Policy Analyst	Canada West Foundation
Shelley Uytterhagen	President	Carthy Foundation
Mark Winfield	Assistant Professor	Faculty of Environmental Studies, York University
Darryl Young	Director of Sustainable Cities	Summit Foundation
Short interviews/information requests		
Don Alexander	Professor	Vancouver Island University
Martin Collier	Founder	Transport Futures
Alex Hill	Formerly Energy Analyst	Green Benny Farm
Michelle Holmes	Manager, Visitor Experience	Rouge Park
Beth Jones	Associate Director	Green Communities Canada
Cindy Lindsay	Director of Member Services	Community Foundations of Canada
David Love	Former Executive Director	The Living City Foundation
Clare MacKay	Vice-President, Marketing and Communications	The Forks North Portage
Kathy Macpherson	Research Director	Greenbelt Foundation
Elyse McCann	Director, Community Sustainability Programs	Envirocentre
Neil Monckton	Executive Director	Think Vancouver
Monique Nutter	Co-chair, Local Food Team	Greater Edmonton Alliance
Carmen Rosen	Artistic Director	Renfrew Ravine Moon Festival
Sarah Van Stiphout	Event Manager & Executive Assistant	Sustainable Prosperity
David Waldron	Principal	Synapse
Liz Weaver	Vice-President	Tamarack
May Wong	Executive Director	The OMEGA Foundation

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From an environmental point of view, cities have always been suspect: largely devoid of nature, teeming with people and their all-too-human problems, cities have appeared to many as “black holes” in nature. In cities, our separateness from nature – both physical and existential – could not be more obvious ... It followed that environmental grantmaking strategies were primarily focused on resource use, wilderness preservation, and other non-urban issues.

Over the last couple of decades, our view of cities and their role in environmental well-being has gradually shifted to a more integrated one. Cities, it is increasingly understood, are where most of the environmental problems of the world originate, and it is in cities where they must be resolved. As Maurice Strong has said, “the future health of our planet will be determined in our cities.”



Suite 300
70 The Esplanade
Toronto, Ontario
M5E 1R2

647-288-8891

cegn.org