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Shade Conference Page

www.toronto.ca/health/resources/tcpc/shade_2007.htm

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The Origins of the Conference

The Context

Since its inception in 1998, the Toronto Cancer Prevention Coalition (TCPC) has been a force for action on health promotion and cancer prevention within and beyond the Greater Toronto Area (GTA). True to this tradition, in May 2006 the Coalition brought together health advocates and activists from across Canada for an intensive one-day conference, *Building Bridges and Public Policy*. The conference aimed to advance healthy public policy and the determinants of health across all chronic disease interests and all jurisdictions—municipal, provincial and federal.

Participants emerged from the conference with a solid commitment to specific action on three key risk factors for cancer.

Risk Factor 1: Environmental Carcinogens

Action: Expand the reach and scope of community-right-to-know policy.

Risk Factor 2: Ultraviolet Radiation (UVR)

Action: Develop and implement shade policy at the municipal, provincial and federal levels.

Risk Factor 3: Occupational Carcinogens

Action: Build healthy workplaces.

Over the months following *Building Bridges and Public Policy*, the relevant risk-specific working groups of the Toronto Cancer Prevention Coalition sponsored working sessions on each of the action areas. On May 11, 2007 the Shade Policy Committee of the Ultraviolet Radiation (UVR) Working Group held a day-long session, *Shade for Good Health and a Green City*, to address action item 2, developing and implementing shade policy at the municipal, provincial and federal levels. Support from Toronto Public Health and Cancer Care Ontario's GTA Cancer Prevention and Screening Network was fundamental to the planning and implementation of this conference. Ninety participants from over 50 organizations throughout Ontario attended.

The text that follows provides an overview of the day and what it accomplished.

The Catalyst

A year prior to the *Building Bridges* conference, on May 4, 2005 a shade policy prepared by members of the Shade Policy Committee was presented to and rejected by Toronto City Council. Undaunted, the committee analyzed the lessons learned, then regrouped at the *Building Bridges* conference to develop and test new strategy, strengthened by the solid support given to action item 2.

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The Critical Mass

Between May 2005 and May 2007, the Toronto Cancer Prevention Coalition and Toronto Public Health played a significant role in keeping shade policy front and centre on the public agenda. The case for shade policy was pushed forward by a critical mass of events. They are, in sequence:

- Supportive actions by the Board of Health, including direction to the Medical Officer of Health
 - to work with other City divisions, community partners and school boards to identify and pilot strategies to increase shade in areas frequented by children;
 - to continue to explore shade policy as a health issue with the managers of relevant Toronto divisions; and
 - to make recommendations to increase the provision of shade in the redesign of Nathan Phillips Square at City Hall.
- Supportive actions by partners such as the Toronto Environmental Alliance which, in July 2005, succeeded in having Toronto City Council put in motion a cooling strategy for the City that included more shade trees to mitigate heat-radiating areas such as outdoor parking lots.
- Shade audits of two major Toronto parks in the summer of 2005.
- Collaboration between the Shade Policy Committee and Friends of Dovercourt Park to expedite the design of a shade canopy for the park. The project was carried out by graduate students of landscape architecture using recycled sails on October 1, 2005.
- Expert input from members of the Shade Policy Committee on ways to incorporate shade into the Nathan Phillips Square redesign project and competition.
- ‘Re tooling’ of the shade policy by Parks, Forestry and Recreation staff in 2006, as a divisional operational policy to guide its park design and development activities and tree planting initiatives. Parks, Forestry and Recreation’s Senior Management Team approved the guidelines in early 2007 and staff reported to the Parks and Environment Committee.
- Creation of the *Toronto Green Development Standard* in June, 2006 (revised January, 2007), which emphasized preservation and enhancement of the urban forest, with the goal of achieving a sustainable canopy of 30-40%.
- Unveiling of City Council’s green plan in March 2007. The plan targets a doubling of leaf cover in the City by 2020, citing several important functions of trees: protecting the population from the sun, cooling the urban heat island and

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conserving energy, soaking up rain from severe storms, and filtering pollution from the air.

- Increasing public concern about environmental issues nationally and internationally, and an increased focus and debate by Canada's federal government and opposition parties on environmental management.

This constellation of events provided an optimal and highly supportive framework for revisiting a shade policy for Toronto while addressing action item 2 with partners and other interested participants. On that basis, May 11, 2007 was selected for a one-day conference to capitalize on the changes and new opportunities in the social and political landscape since Toronto City Council rejected the first proposed shade policy in 2005, and to develop components of a successful policy.

The Structure of the Conference

A Relevant Purpose

The purpose of the conference was to provide a day dedicated to learning about shade policy and to sharing shade-development strategies across communities. Participants were promised that, by the end of the day, they would have:

- Learned about new opportunities and developments—particularly climate change—that accelerate the development of shade policy municipally, provincially and federally; and
- Applied what they learned to the practical development of shade policy in the municipality where they live and work.

Accessible Goals

In addition, the conference was promoted with three broad goals that had appeal for both health and environmental advocates, whether inside or outside Toronto.

1. To establish a common understanding of the current policies and standards in Toronto affecting shade provision and identify strategies to overcome some of the challenges to achieving both natural and constructed shade;
2. To advance shade policy efforts in the context of a strong municipal commitment to environmental issues and the increasing concern at other levels of government;
3. To inform and strengthen community-based initiatives in the Greater Toronto Area and beyond.

Expert Presenters

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Key players who had influenced progress in shade policy and design over 2005-07, particularly in the context of Toronto's response to climate change, presented at the conference. This exciting group of experts, both internal and external to Toronto, provided fresh, original perspectives on shade policy, all based on practical experience. Participants learned first hand about the strategies the experts employed, the missteps, setbacks, evolution and successes they experienced, and had an opportunity to dialogue with them further through question periods and small group sessions. In this way, participants were able to extrapolate the essential elements and connections that would predict the success of their own shade policies, wherever they were developed.

Varied Subjects

Variety in subject matter and appeal was a deliberate choice of the conference organizers, and many areas of interest were covered:

- The risks of ultraviolet radiation in relation to skin cancer;
- Current shade policies, standards and guidelines;
- The importance of the urban forest, and strategies for protecting and caring for it;
- Shade initiatives in schools and other community settings;
- Current thinking and developments in designing natural and constructed shade.

A Common Theme

'Everything is connected' emerged as the central theme and organizing principle of the proceedings. While each speaker put a specific, expert lens on their subject, together they created a common focus and a powerful argument for shade as an essential element of a healthy community. Whether the presentation focused on promoting outdoor activity and preventing skin cancer, combating environmental pollution of air and water, cooling the urban heat island and preventing heat-related illness and death, or improving City aesthetics and tourism, the importance of shade to overall personal, family, and community health was clear.

The Content of the Conference

The text that follows provides a snapshot of the key issues related to shade policy that were covered under the five sections of the conference agenda:

1. Opening Remarks
2. Here Comes the Sun
3. The Meteoric Rise of the Climate Change Agenda
4. The Current Landscape: Policies and Practice
 - a) Growing for Shade
 - b) Planning and Designing for Shade
5. The Community and Beyond.

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Presentations also provided a wealth of information on health and environmental issues that are outside the scope and focus of this report. Presentations are posted on the Toronto Cancer Prevention Coalition's website at http://www.toronto.ca/health/resources/tcpc/shade_2007.htm.

Opening Remarks

Opening remarks were delivered by four community leaders:

- Dr. Lynn From, Dermatologist, Women's College Hospital, Toronto; Professor, University of Toronto; Chair, Ultraviolet Radiation (UVR) Working Group, Toronto Cancer Prevention Coalition
- Councillor Paula Fletcher, Chair, City of Toronto Parks and Environment Committee
- Dr. David McKeown, Medical Officer of Health, City of Toronto
- Fiona Nelson, Chair, Toronto Cancer Prevention Coalition; Citizen Member, Toronto Board of Health.

Issues for Shade Policy

All four speakers were united in their support for shade policy and committed to working with conference participants to make it a reality. The following points were emphasized by individual speakers:

- Shade is cost-effective and beneficial and requires policy and planning. After an initial investment in planting or construction, shade can be utilized over a long time by the entire population. Long-term community investment in shade is preferable to short-term individual investment in sunscreen.
- Environmental and health issues are inextricably linked, and the combined arguments for shade policy are persuasive. Shade cools the City and trees clean the air. The costs of treating sun- and heat-related illness far exceed the costs of providing shade. Illness and environmental degradation are a negative expense; a healthy environment is a positive resource.
- Toronto's commitment to an environmentally sustainable future provides an opportune framework for developing shade policy. Shade policy is both a solution to and a mitigating factor of air pollution, and can be incorporated in the City's action plan to address climate change. Toronto has set the most aggressive pollution reduction targets in the country—80% by 2050; it will not be possible to reach them without a shade policy.
- Citizens and organizations need to work together with City government and their elected representatives, emphasizing the many health and economic benefits of natural and built shade.

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- Heat-related mortality is expected to double and pollution-related mortality to increase by 20% by 2050. Increased shade can lower these estimates.
- Shade makes it more conducive to be active outdoors in warm weather, obviating the trend toward physical inactivity, overweight and obesity—as well as decreasing the likelihood of skin cancer.

Here Comes the Sun

Expert speakers in this section of the conference included:

- Dave Broadhurst, Meteorologist, Atmospheric Science and Applications Unit, Environment Canada; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Dr. Lynn From
- Carol Timmings, Director, Healthy Living, Chronic Disease Prevention, Toronto Public Health

Issues for Shade Policy

- As the ozone layer has become thinner, the population is less protected from the effects of sun exposure. Southern Ontario has the strongest ultraviolet radiation in Canada. Sun protection needs to be provided from spring through fall, particularly between 11 a.m. and 4 p.m. The greatest protection is afforded by trees with dense, wide canopies and low foliage, as they accommodate various angles of sunlight throughout the day. Built shade offers less protection, as the location of the shade is fixed.
- Skin cancer is the most common cancer in Ontario, representing one third of all new cancer cases. The treatment costs are considerable due to the sheer number of cases. Melanoma is frequent among young adults and treatment options are few; hence prevention is critical. Sun protection through shade is the most obvious and effective means of protecting the population as a whole.
- Effective public health strategy for UVR protection includes working with partners on sun safety information for the public; advocacy for protective policies—beginning with such vulnerable populations as outdoor workers; and collaboration on initiatives in key settings—such as schools and day care centres. The most effective strategies are set in the context of the determinants of health, so that healthy behaviours are within the reach of the population as a whole. The most effective vehicle for UVR protection is public policy.

The Meteoric Rise of the Climate Change Agenda

The relevance of climate change to shade policy was addressed by:

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- Katrina Miller, Toxics Campaigner, Toronto Environmental Alliance (TEA) and Member, Occupational and Environmental Working Group, Toronto Cancer Prevention Coalition
- Jennifer Penney, Director of Research, Clean Air Partnership

Issues for Shade Policy

- UVR issues intersect with environmental issues. Trees have particular significance, as they reduce heat while cutting down the production and use of electrical energy for air conditioning in summer and home heating in winter. Trees also protect the population from sunlight, take carbon dioxide out of the air, filter particulate matter, and retain storm water run-off. A shade policy that includes doubling the existing tree canopy to 34 % is good environmental policy and good health policy.
- Trees are a critical part of urban infrastructure, as important as roads, energy and water distribution. Urban heat, concrete and asphalt surrounds, cramped space above and below ground, use of road chemicals—as well as warmer winters, warmer summer nights, less precipitation, more extreme weather, and new insect pests—are creating a situation where we are losing shade trees faster than we can replace them. We need resources to plant trees that can survive the new climate reality, and to nurture these trees to maturity so that they can play a role in reducing the negative health and environmental effects of climate change.
- The ill effects of heat are felt most by the poorest members of society, who are more likely to live in densely populated buildings without air conditioning or on the street. People living in new towns and suburbs, where trees are scarce, are also vulnerable. These are priority populations for shade policy.

The Current Landscape: Policies and Practice

Growing for shade was addressed by:

- Diane Stevenson, Manager, Service Improvement and Coordination, Parks, Forestry and Recreation, City of Toronto
- Carol Walker Gayle, Supervisor, Forestry Policy and Standards, Parks, Forestry and Recreation, City of Toronto; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Alex Shevchuk, Supervisor, Community Design and Planning Initiative, Parks, Forestry and Recreation, City of Toronto; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition

Issues for Shade Policy

- Lessons learned from the failed attempt to introduce a shade policy to Toronto in 2005 have influenced Parks, Forestry and Recreation to develop its own culture

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and improve internal practices and guidelines as much as resources allow. The groundwork is now in place, and the time is right to reintroduce shade policy to Toronto City Council. It is important for the policy to cover both natural shade through tree planting, and constructed shade that provides sun protection until trees reach maturity. Shade audits are an excellent initial step toward producing a policy, as they provide a baseline reading of what exists and what is needed. The division's guidelines for shade audits are one example of internal policy development.

- Growing for shade involves a complexity of considerations related to tree maintenance and management. Public education and engagement are critical components of policy and practice, as most trees grow on private property; residents need to know how to work with the municipality to care for their trees and keep them healthy. A by-law to protect trees on private property is another important strategy. So are tree advocacy programs that help to create a tree culture by informing the population about what trees do for their environment and health.
- Playgrounds are a priority area for shade policy because they serve children, who are most vulnerable to sun exposure. Playgrounds tend to be open spaces with few trees and many sun-reflecting surfaces such as wading pools and pavement. Outdoor swimming pools, sports fields, tennis courts, skate parks, outdoor basketball and volley ball courts, community gardens and beaches also provide unique challenges for shade policy.

Planning and designing for shade were addressed by:

- Liora Zion Burton, Environmental Planner, Policy and Research, City Planning, City of Toronto; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Leo deSorcy, Manager, Urban Design, North District, City Planning, City of Toronto
- George Kapelos, Chair, School of Architecture, Ryerson University; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Heidi Campbell, School Ground Design Consultant, Toronto District School Board and Evergreen Canada; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Adrina Ambrosii, Urban Forestry Consultant; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition

Issues for Shade Policy

- The Toronto Green Development Standard (January, 2007) provides an integrated set of targets, principles and practices to guide the development of City-owned facilities and encourage sustainable development in the private sector. The

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standard addresses mid-to high-rise residences, commercial, industrial, institutional and residential development. While the standard is rooted in environmental issues, it provides leverage for shade policy, especially as it makes a number of recommendations for achieving and maintaining a sustainable tree canopy in various City settings.

The Toronto Green Development Standard is an example of incremental policy development based on expert recommendations and best practice. Currently, the performance targets are mandatory for newly developed or re-developed city-owned properties, but not mandatory for the private or non-City sector. However, if that sector chooses to practice green development, the standard provides relevant targets to follow voluntarily. By 2012, and with appropriate regulatory authority, the standard could become mandatory in all City settings and sectors.

- Planning and designing for shade in Toronto has come a long way in the past five years, aided by new tree-planting and permeable pavement technologies. Toronto is working on a comprehensive, City-wide streetscape plan which includes a commitment to provide shade trees on all streets. Elimination of front-lawn parking has been a significant supportive step. While public streets are the main focus of the plan, small open spaces and laneways are also targeted. Guidelines for developing shaded parking lots and adjacent pedestrian routes will be put forward to City Council this fall. Built shade for car and bicycle parking is also in development.
- There are many opportunities for the design community to shade the City. Some recent innovative projects include the sail canopy in Dovercourt Park and the shade structure at the Ferry Terminal. The challenge is to make sure the right structure is in the right place, and that it accommodates changing sun angles and heat conditions. New technologies—for example, for structures that fold or move—make it possible to vary the interaction of the structure and the user for the most effective protection from sun and inclement weather.
- Schools and school grounds are prime settings for developing shade policy and practice. The Toronto District School Board recognized the need to increase shade on their property in order to protect elementary school children—who spend 25% of the school day outdoors—and to make classrooms cooler and more comfortable for learning. This resulted in two major initiatives. The Evergreen Partnership works with participating school communities to effect a variety of ‘greening’ projects. Eco-Schools has developed a program and guidelines to produce greater environmental awareness and more sound practices on school grounds. Tree planting, transplanting, and maintenance in areas of active play are a central feature of the program. In addition, as school playgrounds are built or retrofitted, shade must be provided according to school board standards.

The Community and Beyond

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Examples of community shade initiatives, in progress or planned, were presented by:

- Janet McKay, Executive Director, LEAF (Local Enhancement and Appreciation of Forests)
- Dr. Andy Kenney, Senior Lecturer, Faculty of Forestry, University of Toronto; Board Member, Tree Canada Foundation
- Cam Collyer, National Learning Grounds Program Manager, Evergreen Canada
- Diana Hamilton, Senior Architect, Delcan Corporation; Member, Shade Policy Committee, UVR Working Group, Toronto Cancer Prevention Coalition
- Chris Pommer, Partner, Plant Architect Inc.; Winner, Nathan Phillips Square Redesign Competition

Issues for Shade Policy

All speakers in this section of the conference provided working examples of urban shade policy and practice in action. Contact information for their organizations is available on the Toronto Cancer Prevention Coalition website. Presentations included the following key points:

- Providing and maintaining trees in the urban environment is a difficult task that requires partnership with the community. Mature trees provide the most extensive shade and deliver the best environmental and health benefits. People need to know what a tree needs to survive in the City so that they can care for and preserve existing mature trees. LEAF offers a backyard tree planting program and hands-on education for growing and maintaining trees. It also offers guided tree tours in various languages that include local history and stories, and reinforce a culture of community-based urban forestry.
- The Tree Canada Foundation partners with municipalities and community groups to plant, inventory and manage trees. It also partners with Canadian school communities to 'green' Canada's school grounds and connect urban children to the natural environment. Public engagement and awareness, innovative urban forestry conferences, a Canadian urban forest network and urban forest strategy, as well as print and video-based publications are among Tree Canada's activities. Since it was founded in 1992, the Foundation has planted 74 million trees across Canada.
- Evergreen Canada engages communities and influences policy on a number of 'green' issues, including shade. Shade is viewed in the context of improving health and wellbeing, ecological diversity, energy conservation, and child development. The organization develops partnerships with institutions in urban centres across Canada to create shaded outdoor learning areas and play structures, using both built and natural shade. Community engagement is a fundamental operating principle.

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- As a result of successful advocacy by the Shade Policy Committee, a requirement for shade was embedded in the call for proposals to redesign Nathan Phillips Square in Toronto. The winning proposal includes a ring of shade trees (an ‘urban forest’) around an open agora for public events—with plantings, benches, chess tables, and public art to encourage people to come, appreciate and linger. New growing technologies and innovative planting strategies make it possible to create a natural landscape in the square that will remain vibrant throughout the year. Constructions for shading walkways are another feature. A roofed theatre will serve as an elevated, shaded terrace when not in use as a stage. At the roof level of City Hall, a green roof and public garden are planned.

The Conference Workshops: Creating Shade Policy

Conference participants broke into groups to discuss the practical development of shade policy in their own municipality. The discussion was guided by a short list of questions provided to each group leader, and answers were recorded. Accounting for the fact that many answers overlapped, a sample of the main points of discussion is combined below under each question.

From what you learned today, what would you consider the key areas of focus of a shade policy for your community?

- Assure that shade goals and objectives are included in the Official Plan of the municipality.
- Promote internal collaboration and communication among municipal departments and divisions so that they work together with a more effective process to achieve a stronger outcome.
- Build health criteria into municipal planning proposals, so that all development considers community health from the outset. This would raise the official consciousness of the importance of shade.
- Strengthen your argument for shade policy by making the link between the benefits to the environment and to human health. For example, shade trees decrease the effects of UVR and environmental contaminants and increase healthy outdoor activity.
- Build partnerships of like-minded allies so that shade policy is supported from a variety of perspectives. Create synergy.
- Make friends with municipal decision makers who are sympathetic to shade, and give them information to galvanize their active support.

What would be your priorities?

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- Focus on trees rather than shade, as they have greater general appeal and the benefits of the tree canopy are easily understood. Emphasize tree maintenance and education, and mobilize the community to take care of their trees.
- Begin with areas where children and youth gather; school yards, playgrounds, outdoor recreation facilities.
- Create a green culture. Engage the public to expect and demand a tree canopy and built shade as their right, much as they have made recycling and composting their right. Community rights become social norms.

What are the essential elements of the process you would put in place to assure success?

- Coordinate strategy so that you engage various municipal departments and divisions with a stake in shade policy.
- Set tangible, incremental goals for increasing the shade canopy over time. Include a surveillance system to track progress. Issue a report card at regular intervals.
- Leverage off legislation in place and influence the development of legislation, regulation and by-laws; for example, the City of Toronto Act, the Public Health Act.
- Cultivate champions for shade policy among community leaders who are your natural allies; for example, the Medical Officer of Health.
- Develop political and community consciousness and support.

What opportunities and processes are you already working with that the conference should know about?

- Capitalizing on the City Plan and urban design, engineering and technology;
- Making deputations to Toronto's Parks and Environment Committee (June 18, 2007);
- The existence of tree by-laws on municipal and private property;
- Staff reports to City Council, which increase the knowledge and motivation of elected officials;
- Applications and site plans for rezoning that provide opportunities for applying green standards;

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- Internal operating policies for municipal workers that help the municipality to model good sun protection practice;
- Leveraging off neighbourhood beautification projects;
- Linking the activities of the UVR Working Group of the Toronto Cancer Prevention Coalition to other stakeholders, including environmental groups, elected officials, City programs, divisions and services, and the general public.

What barriers have you confronted?

- Lack of coordination of effort and sustained focus has resulted in our losing ground. Acute issues—for example, tree loss or damage due to severe weather—consume the urban forestry budget and proactive shade planning gets lost. Long-term maintenance and operating costs are an issue.
- Other municipal issues appear more urgent and get greater attention at the political level. Some issues—for example, the need for sunlight to grow food—compete with and obscure the shade issue.
- Cost arguments tend to overwhelm benefit arguments, no matter how well presented. Dealing with the development community and politicians is challenging. The first question is always, ‘how much is this going to cost us?’ They feel that they bear the costs, while the benefits go to someone else.
- Increasing shade in intensely urban areas may be a retreating target. It will be close to impossible to achieve a tree canopy of 30-40% in the concrete jungle of downtown Toronto. Outdoor parking lots are another challenge. Opportunities are greater in outlying areas and in areas of redevelopment such as Regent Park and the West Donlands.
- The traditional focus on lawn maintenance poses a barrier to growing trees. Painstaking effort goes into lawn maintenance, and people with lawns don’t like the fact that trees impede lawn growth.
- Tree planting and growth is restricted by overhead wires and cables, underground electricity, gas, water and sewage lines and, in rural areas by the location of septic tanks. In the urban environment there may be very little underground space for tree roots to grow. It will take considerable time and effort to find ways for trees and utilities to cohabit and be compatible.

What are your milestones of progress?

- Community groups are increasingly well organized and functional. Linkages between school-based projects and their communities are increasing knowledge and the common cause for shade. Civic improvement groups have also embraced

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the issue. There appears to be a groundswell of support now that the public is more aware of the negative effects of climate change.

- Over the past decade or so, Toronto Parks have increased their tree canopy; for example, at the north end of Riverdale Park there is now an urban forest where there used to be a barren hillside. Natural vegetation has moved into areas such as south Etobicoke. There are more bike paths in naturalized areas which enhances their use and importance.
- Local Conservation Authorities have had a major influence on naturalizing the environment and in getting schools and communities involved in the process.
- Windsor's downtown has been transformed. Road medians are full of trees and plants. In LaSalle and Tecumseh many varieties of trees have been planted with the assistance of Boy Scouts and school children. The greening habit has been established with the young.
- There are more school gardens and school planting projects everywhere.

What have you learned that would be useful to others?

- We are missing a prime opportunity if we don't concentrate on the tree canopy growing in the backyards of private property owners. Tree maintenance is easier for homeowners than lawn maintenance and produces a greater benefit. You don't have to cut, weed, water constantly, or use chemicals that harm human health. Over time homeowners can see the results of growth, while lawns don't change.
- Competition works. When trees are planted in a schoolyard, neighbouring school communities notice and want them too. School trustees point out the number of eco-schools in their ward, and trustees from other wards want to match or exceed that number. Perhaps we should go bigger and set up a shade competition between Toronto and Vancouver.
- The heat island effect in school grounds is a critical catalyst for shade policy. Ambient temperatures of 26 degrees can increase to 48-55 degrees on paved school playgrounds. The effects on children's health and learning are considerable. The place to put the greatest effort is the place where it will have the greatest impact.
- People are ready to hear the message about climate change and shade in a way they were not able to hear it ten years ago.
- Intergenerational and intercultural connections are important and should be made. Older people understand the importance of trees. Older people from other cultures tend to socialize outdoors and residents of seniors' facilities like to sit

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- outside in shaded areas. Grandparents understand gardening and caring for the land, and are an excellent resource for school children and school-based projects.
- Teachers don't necessarily know about outdoor education or are comfortable with it. They appreciate expert guest speakers, who can talk to school children about topics such as trees and shade. Everyone benefits: the children, the teacher, and the subject.
 - Engage the power of parent advocates. They are well aware of the health issues. Parents have had a major influence on increasing shade at day cares and schools, and are willing to engage the support of their local school trustees.
 - Business can be an ally. For example, in Etobicoke, a Home Depot installed a shade feature.
 - Push for responsibility and accountability by government. If shade targets are voluntary, they are vulnerable. Municipal councillors need to make a concerted effort to implement and monitor shade policy, and there needs to be provincial and federal legislation to back them up. Look at the whole federal/ provincial/ municipal system and encourage each player to do their share. Point to international best practice in shade policy and build your case.
 - Planting for shade takes time, patience, interdisciplinary effort and solidarity among issues and viewpoints. These are the foundation of good policy.

Conference Results: Outcomes and Actions

When conference participants assembled in plenary following the workshops, there was a sense of excitement that the climate change agenda had accelerated the development and reinforced the credibility of shade policy. There was also general agreement that the conference had given shade advocates and activists a wealth of information and strategy to apply to their work. Community animation and engagement were recognized as fundamental to a multi-strategy approach.

At the closing session, participants identified the following immediate and longer-term actions post conference.

Immediate Actions

- Share the information, data and strategies from the conference—both to participants and a wider audience—by posting presentations on the Toronto Cancer Prevention Coalition website. Provide links to the websites of the speakers from partner organizations.

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- Assure that the report of the conference, including major points raised in the workshops, is on the TCPC website by mid-summer and distributed in hard copy by the fall of 2007.
- Put out the call for shade partners to send a message about the multiple health, environmental, social, aesthetic and economic benefits of shade by mobilizing around these dates and developments:
 - June 18, deputations to Toronto's Parks and Environment Committee on the City's climate change and clean air action plan agenda, *Change is in the Air*—with specific attention to Action Item 24, 'to double the existing tree canopy by 34% by 2020'.
 - Fall, 2007: Meeting of Toronto's Parks and Environment Committee to consider the implications for shade policy of a staff report on playground shade based on a shade audit.
- Sustain the conference momentum by returning to our individual communities, working with existing shade partners, and engaging new ones. Bring in all the key players, public and private. Dedicate attention to homeowners.

Longer-Term Actions

- Identify and work with active shade advocates. They are well informed and alert to opportunities to raise awareness and pressure for change. They tend to know what is happening at the municipal committee level and are a resource for helping the public to make their voices heard.
- In Toronto, set a goal to put shade among the top five of the City's 27 priorities for the climate change and clean air action plan agenda.
- Make greater community engagement an ongoing priority. Give the public the information they need to be proactive on shade issues. For example, Toronto by-laws require public notification 14 days before hearings on any new development that impacts trees, and public comment is invited. This is an opportunity for the public to exert a positive influence on reasonable development, and permit trees that can be saved to be saved. The public should also contact their Ward councillors on these kinds of issues, as councillors exert an important influence on the outcomes.
- Inform Toronto residents that they can call the Division of Parks, Recreation and Forestry about a situation of concern where a tree may be at risk. The division can investigate and apply standards for tree protection.
- Support municipal staff—for example, in public health, recreation, parks, planning, and environment—who are already engaged in shade issues. Bring

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their work to the attention of decision makers and elected officials. Municipal staff are expert, dedicated, and helpful.

Five Essential Tactics for Developing Municipal Shade Policy

1. Embrace the principle that ‘everything is connected.’ It is a powerful advocacy tool.
2. Engage all the partners who know all the arguments: health, environmental, aesthetic, social, economic, cultural, planning, community, political. Strength is in numbers and diversity.
3. Begin with vulnerable populations; outdoor municipal workers, children and youth, people of low socio-economic status. They need your help the most and their needs are the most persuasive.
4. Remember that public policy comes from private influence. Engage homeowners, neighbourhood groups, school communities, business improvement associations. If the issue is public policy, get their proactive input before it is too late and decisions are made. Advocacy takes initiative and common courage.
5. Work with municipal staff. They know about shade issues and have a wealth of knowledge and creative solutions to share. Find out about internal guidelines that, with support and advocacy, could become public policy.