

Sustainable Neighbourhood Action Program

ACTION PLAN SUMMARY



Toronto and Region
Conservation
Authority

Burnhamthorpe Sustainable Neighbourhood Retrofit Action Plan (SNAP)

Building a healthy and resilient community

In collaboration with:



The Sustainable Neighbourhood Retrofit Action Plan (SNAP) is a collaborative, neighbourhood-based solution for advancing urban renewal and climate action in older urban areas. SNAP helps municipalities improve efficiencies, draw strong local community support and build innovative partnerships for implementation of a broad range of initiatives in the public and private realms.

The Burnhamthorpe SNAP is an Action Plan to transform this 40 year old Mississauga neighbourhood into one that's healthy and resilient (see Figure 1). One of six pilot SNAPs in the Toronto Region, the Burnhamthorpe SNAP was developed by Toronto and Region Conservation Authority (TRCA) in partnership with the City of Mississauga, Region of Peel and many other community stakeholders (see Table 1).

Figure 1



Located along the eastern boundary of the City of Mississauga, within the Etobicoke Creek Watershed, Burnhamthorpe is an established neighbourhood developed between the late 1960s and late 1980s. The neighbourhood was selected because it provides a good opportunity for environmental and community improvement given its age (25-40 years old), diverse mix of land uses and housing types, local soils that are conducive to achieving effective Low Impact Development (LID) and runoff reduction where no quality or erosion controls exist, and location within the Etobicoke Creek watershed- acting as a regeneration opportunity area. A number of significant active community champions and local institutions also exist in the area.

The Burnhamthorpe community has a relatively stable and diverse population ranging in age, family, size, ethnicity and income. It is made up of a few smaller established neighbourhoods with different housing types, including single and semi-detached homes, town homes and high-rise buildings.

There are a number of amenities and services including commercial strip malls and plazas, a community centre, library, places of worship and a number of schools. The area is also well served by seven municipal parks, the biggest being Garnetwood and Fleetwood Parks which straddle the north and south sides of Burnhamthorpe Road, respectively. Much of the area's natural heritage system is confined to the Etobicoke Creek valley lands to the east and the Bus Rapid Transit (BRT) corridor to the north (see Table 2 for the Neighbourhood Profile).

Notably, the area south of Burnhamthorpe Road features a large number of apartment towers that provide housing for newcomers to Canada, amongst others. Poverty, unemployment, and access to fresh food have been identified as key issues in this area by local community leaders. As a result, the Action Plan will aim to address these local community needs in addition to the main SNAP objectives.

Table 1

Who's Involved?

ORGANIZATIONS

Toronto and Region Conservation Authority (TRCA)
City of Mississauga
Region of Peel

COMMUNITY GROUPS

Rockwood Homeowners Association
Dixie-Bloor Neighbourhood Centre
East Mississauga Community Health Centre
Ecosource
Burnhamthorpe Library
Burnhamthorpe Community Centre
Fleetwood Residents Association
Residents, Schools, Businesses

UTILITY COMPANIES

Utility Partners:
Enersource
Enbridge Gas



Table 2

Neighbourhood Profile

STUDY AREA SIZE

432 ha

LAND USE

Low Density Residential – 35%

Medium Density Residential – 16%

High Density Residential – 9%

Commercial, Institutional, Industrial – 9%

Parks, Open Space – 20%

Roads – 11%

DEMOGRAPHICS

(*based on 2006 Census)

Population: 20,864 (7,300 households)

Immigrants: 53.9% (majority pre-1991)

Median age: 38.9 years

Language:

English as mother tongue (41.3%)

Other as mother tongue (57.6%)

Most common languages spoken at home
(other than English and French):

Polish, Urdu and Tamil*

Median household income: \$65,428

Employment rate: 62.2%

Unemployment rate: 6.5%

Dwellings: 58% owned, 42% rented



Table 3

How we're listening

RESEARCH TOOLS

Resident surveys

EVENTS & DEMONSTRATIONS

Neighbourhood festivals

Movie nights with environmental and community focus

Educational workshops

Tree planting events

Participation at other local events

Depave Paradise Demonstration Project

FEEDBACK SESSIONS

Meetings with Municipal and Regional staff
(one-on-one and joint)

Meetings with local community leaders

Meetings with local stakeholders

A Closer Look at the Burnhamthorpe SNAP

The Burnhamthorpe SNAP identifies the most strategic actions to improve local environmental conditions and address local community interests. It will help further the objectives set out by the City of Mississauga's: **Living Green Master Plan** (2012), **Our Future Mississauga Strategic Plan** (2009), **Water Quality Control Strategic Update** (under development), **Urban Forest Study** (2011), **Urban Forest Management Plan** (2014), **Natural Heritage and Urban Forest Strategy** (2014), **Cycling Master Plan** (2010), **the Region of Peel's: Livable Peel Strategic Plan and Policies** (2005), **Climate Change Strategy** (2011), **Peel Region Urban Forest Strategy** (2011), **Active Transportation Plan** (2010) and **Water Efficiency Strategy Update** (2012) as well as TRCA's: **Living City Strategy, Policies and Programs, Etobicoke and Mimico Creeks Watersheds Plan** (2002) and **Technical Update Report** (2011), **Terrestrial Natural Heritage System Strategy** (2006), **Low Impact Development Stormwater Planning and Design Guide** (2010), and **Stormwater Management Criteria** (2012). The SNAP will also support energy conservation efforts of the local utilities, Enersource and Enbridge Gas.

The Burnhamthorpe SNAP (*Figure 2*) focuses on building a more environmentally friendly and resilient community through the following three key focus areas: Occupying the Street, Residential Resilience and Food Tower Connection. These areas of focus demonstrate synergies between various retrofit themes including stormwater management, natural heritage and urban forest, energy conservation, water conservation, active transportation, and health and well-being.

Figure 2

BURNHAMTHORPE
Sustainable Neighbourhood
Retrofit Action Plan



Table 4

Key Outcomes Over the Long Term

STORMWATER MANAGEMENT

Improve water balance through runoff reduction and promote infiltration / evapotranspiration; reduce erosion impacts through peak flow reduction for 25 mm storm event; and enhance quality control by increasing TSS (Total Suspended Solids) removal for paved areas.

NATURAL HERITAGE & THE URBAN FOREST

Achieve City of Mississauga's Urban Forest target by expanding the overall tree canopy from 17.0% to 20.0% of the area.

Achieve a total of 30.0% by planting trees on both public and private lands (i.e. low and high density residential, institutional, commercial, parks and streets).

WATER CONSERVATION

Achieve Region of Peel Water Consumption target by reducing the overall indoor water consumption of single family residential housing type from 235 LCD to 150 LCD by 2025 and promoting reduction in water consumption amongst other users.

ENERGY EFFICIENCY

Reduce low density residential natural gas consumption by 4.0 % and electrical consumption by 1.5%;

Reduce multi-unit residential electrical consumption by 11.0%;

Reduce commercial and institutional natural gas consumption by 22.0% and electrical consumption by 8.0%; and achieve a reduction of 500 kWh per day in community street lighting

ACTIVE TRANSPORTATION

Increase Local and Regional Transit mode share from 10.8% to 15.0%, and increase Active Transportation mode share from 8.2% to 12.0% by 2031, during the morning peak period¹.

HEALTHY COMMUNITIES

Improve built environment and trail system to promote community walkability and place-making; increase access to fresh produce, local food production and food sharing through community gardening, balcony gardening and food sharing programs; and provide recreational opportunities for people of all ages.

¹The Plan also contains targets for reducing Auto Driver mode share, and increasing Auto Passenger model share.

Below is a short description of the primary components of the Action Plan, followed by an overview of next steps to refine the Plan and develop the implementation program. Key outcomes of the Burnhamthorpe SNAP are presented in Table 4.

Occupying the Street

The Occupying the Street area of focus looks to incorporate active transportation infrastructure, ecological features (stormwater management and urban forest) and art into street design. It aims to inspire increased social interaction and positive resident ‘occupation’ of the street.

The existing streetscape within the Burnhamthorpe SNAP is typical of suburban areas of this age and is not currently equipped for an invigorating occupation that is centred on people, nor does it fully integrate ecological features. Quite opposite, it tends to promote driving as opposed to more active modes of transportation, doesn’t incorporate stormwater management features, has potential to accommodate more trees and landscaping, and doesn’t sufficiently contribute to a local ‘sense of place’ or display local art and/or culture.

The Occupying the Street concepts (*please see Figure 3 and Figure 4*) demonstrate transformation of the street that promotes integration of environmental features, creates a better experience for pedestrians and cyclists and contributes to a local ‘sense of place’.

Figure 3

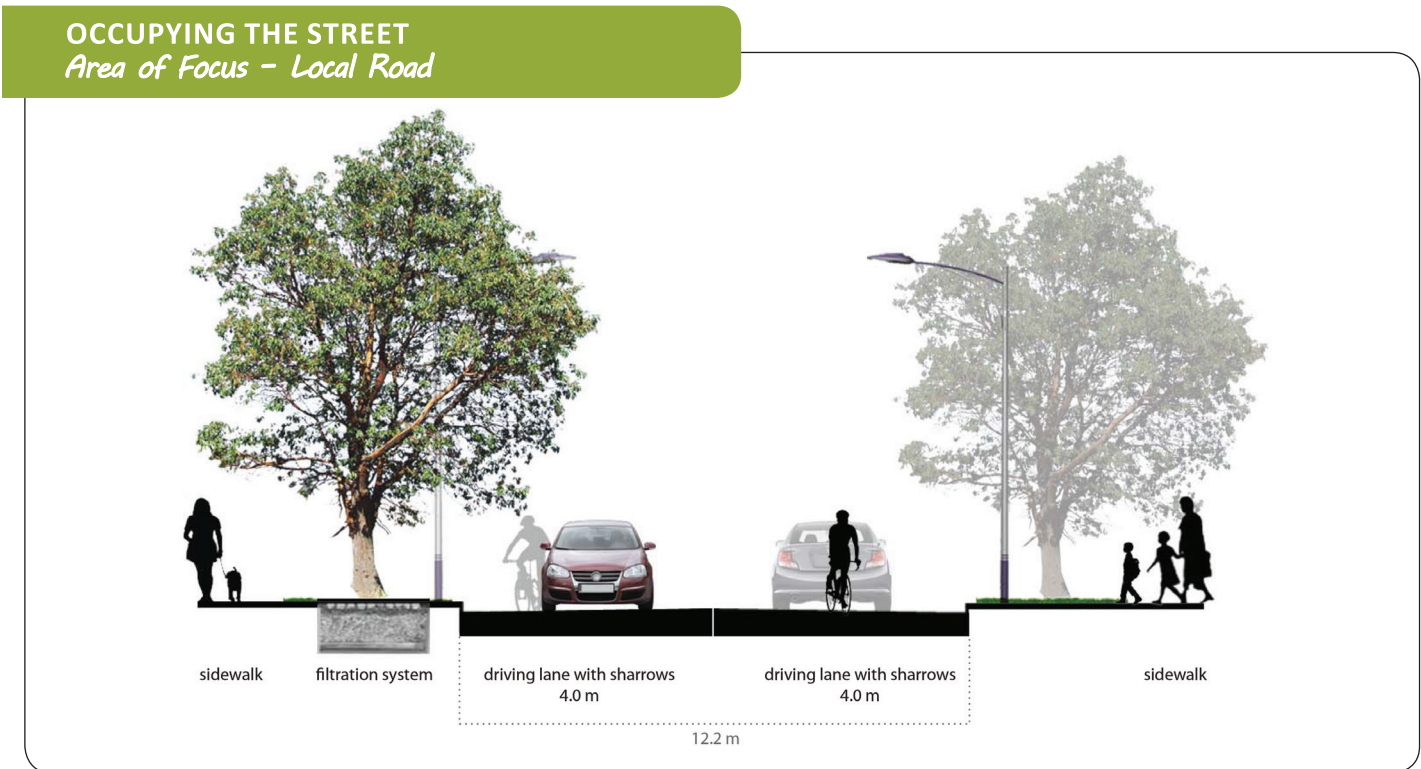
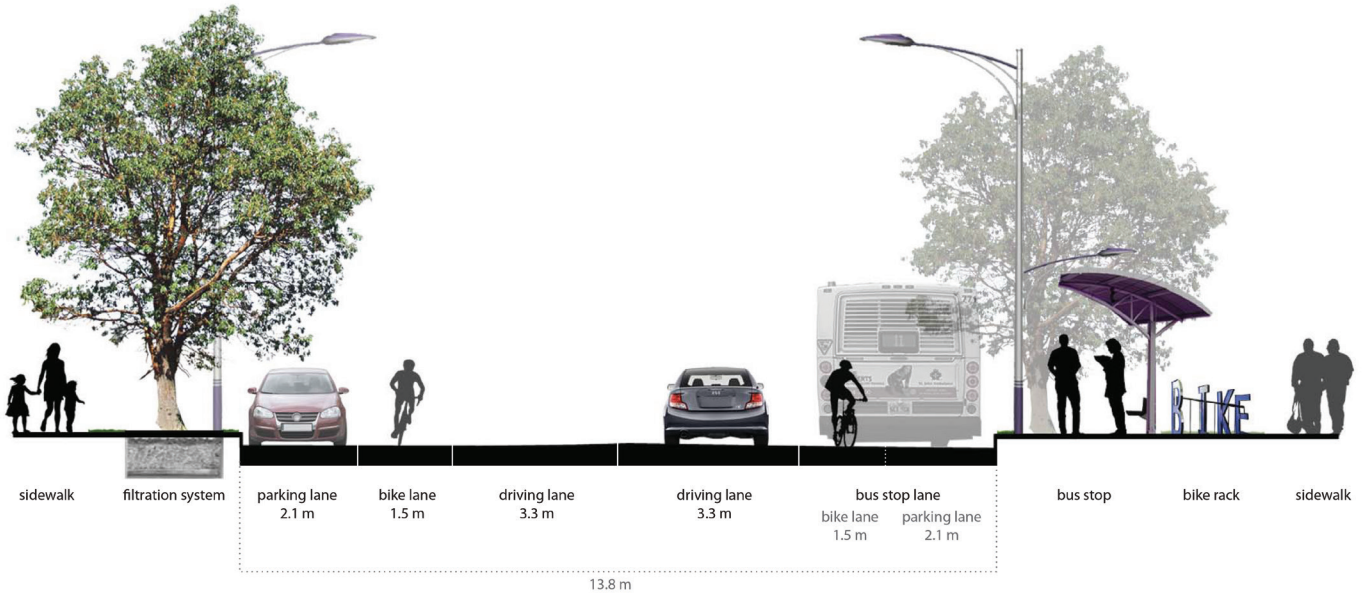


Figure 4

OCCUPYING THE STREET Area of Focus – Collector Road



From Grey to Green!

As a demonstration of local action, the Burnhamthorpe SNAP project partnered with Ecosource and Russet Homes Co-op to deliver a Community Depaving project at 3360 Ponytrail Drive. The multi-partner team of local volunteers and private-sector sponsors removed pavement from an under-utilized basketball court and transformed the area into a vibrant garden and a gathering space. The site now acts as a local demonstration and inspiration to other property owners, and shows how privately owned common space can provide tremendous social and environmental benefits. This project was supported by Depave Paradise, an initiative of Green Communities Canada



Residential Resilience

The Residential Resilience area of focus looks to improve the residential areas through a combination of strategic actions related to various sustainability themes including stormwater management, natural heritage and the urban forest, active transportation, healthy communities and water and energy conservation. Different sets of strategies were identified for Low Density Residential areas, Medium to High Density Residential areas and Municipal Lands (please see Figure 5).

Figure 5

RESIDENTIAL RESILIENCE Area of Focus



Low Density Residential

At 35%, low density residential is the predominant land use type within the Burnhamthorpe SNAP. Background research as part of the project identified that most downspouts amongst local homes are connected to the sewer system, that Also, due to recent more frequent heavy rain events, several areas within the Burnhamthorpe SNAP experienced increased basement flooding. Given these findings the main actions suggested for low density residential buildings include: stormwater management techniques such as downspout disconnection and rain gardens, tree planting (it was identified that each lot has the potential to plant one tree), Fusion Landscaping as well as upgrades to both indoor energy and water systems. In addition, as there is local interest in food gardening, there is potential to promote harvest or backyard sharing with residents living in apartment buildings to enable access to fresh produce.

Medium to High Density Residential

The Burnhamthorpe SNAP area has a fairly high concentration of medium to high density buildings (25% of land area is occupied by these two land use types). Most apartment buildings are concentrated along the Bloor Street corridor and most of them are rentals. Given the size of these lots and their age, a number of actions have been recommended for such properties including tree planting and parking lot greening, on-site stormwater management techniques (permeable paving, rain gardens, de-paving, etc.) as well as indoor and outdoor water and energy system upgrades. In addition, as access to fresh food has been identified as a barrier amongst some residents living in local apartment buildings, balcony vegetable gardens and community gardening opportunities are also recommended to contribute to the overall health and well-being of the entire neighbourhood.

Municipal Lands

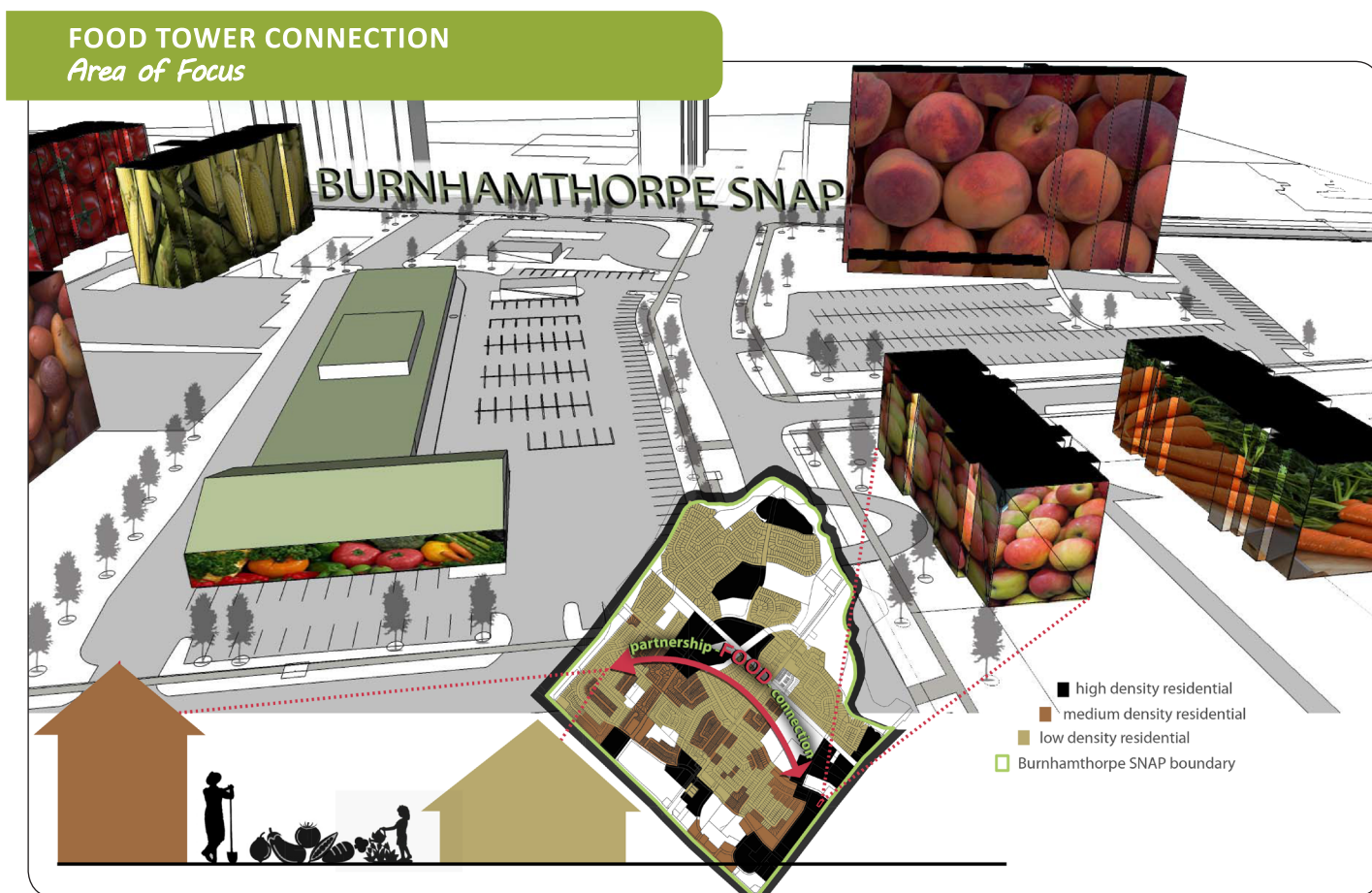
Municipal lands within the Burnhamthorpe SNAP study area consist of roads and parks or open space areas. The Burnhamthorpe community is well served by as many as seven municipal parks. A resident survey administered as part of the Burnhamthorpe SNAP project revealed that parks and park programs were identified as the main aspects that local residents would like to see improved in the neighbourhood. More trees, trails, community garden and picnic/sitting areas were identified as features that residents would like to see most in their parks. Therefore, it is recommended that parks be rejuvenated to fit with the local needs and strengthen the neighbourhood's identity and sense of community. Since providing residents with opportunities to grow their own food has been identified as an area of need, park retrofits can incorporate features such as community gardens, orchards and food forests. Actions for roads have been identified under the Occupying the Street area of focus outlined above.



Food Tower Connection

Consultations and conversations with local community leaders, agencies and residents throughout the Burnhamthorpe SNAP project repeatedly pointed out the need for better access to fresh food by residents living in apartment buildings which include low income residents, recent new comers to Canada, and seniors. The actions suggested under the Food Tower Connection theme would focus on both enabling individuals living in apartment buildings to grow their own food through balcony gardening, community gardens and back yard sharing programs, or receive fresh food through harvest sharing programs that engage single family homeowners who grow their own produce in their backyards and are willing to donate excess to those in need. Figure 7 illustrates the actions suggested in the Food Tower Connection area of focus.

Figure 7



In addition to these three focus areas, implementation will also address retrofits to institutional and commercial buildings. Both have been identified to be addressed on a long-term implementation time frame and/or as opportunities arise. Retrofits associated with these areas of focus would include actions to further a suite of sustainability themes including Natural Heritage/Urban Forest, Stormwater Management, Water Conservation, Healthy Communities, Active Transportation, as well as Arts and Culture.

NEXT STEPS

With the planning phases of the project complete and key implementation areas of focus identified, the project partners will now focus on the development of implementation programs to pilot and monitor. A preliminary implementation framework has been developed for guidance. It identifies a lead for each proposed project, potential partners and next steps, where applicable. In keeping with the highly collaborative process that was followed in the development of the plan, local groups, community leaders and stakeholders will continue to be engaged in the implementation initiatives.



Acknowledgment

The partners wish to acknowledge Dillon Consulting Limited for their contribution to the development of the Burnhamthorpe SNAP Action Plan (Phases 2 and 3).

© 2015, Toronto and Region Conservation Authority. All Rights Reserved.

The preparation of this Sustainable Neighbourhood Retrofit Action Plan was carried out with assistance from the Green Municipal Fund, a Fund financed by the Government of Canada and administered by the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.