HEALTHY BUILT ENVIRONMENT TOOLKIT:

PLANNING & HEALTH

IN OTTAWA



Healthy Built Environment Toolkit: Linking Planning and Health in Ottawa

Authors:

Anthony Clements Haines | Sarah Libera | Benjamin Morin Julia Sjaarda | Tyler Venable

SURP 823 Project Course
Supervised by Dr. Patricia Collins
December 2016
School of Urban and Regional Planning
Department of Geography and Planning
Queen's University





In partnership with:



EXECUTIVE SUMMARY

Project Objective

The objective of this project is to develop a policy toolkit to support healthy built environments in Ottawa, Ontario. Specifically, this toolkit is intended to assist staff at Ottawa Public Health and the City of Ottawa in the following ways:

- In highlighting the linkages between the built environment and health:
- In identifying existing local policies that promote healthy built environments; and,
- In identifying opportunities to strengthen local policies to further support healthy built environments.

Health Implications of the Built Environment

Evidence shows that elements of the built environment such as urban form and community design, transportation and mobility, and access to natural environments can affect health outcomes. Depending on its structure and organization, the built environment may have the following health implications:

Decreased physical activity: Only 10% of Ottawans walk or cycle to work and only 19% of children use active transportation to get to school (Ottawa Public Health [OPH], 2013).



Increased prevalence of obesity: In 2012, 47% of Ottawans were overweight or obese (OPH, 2014).



Increased prevalence of asthma and respiratory diseases: 10% of Ottawans over the age of 12 have asthma, making it one of the top five chronic conditions reported by Ottawans (OPH, 2014).



Increased risk of heat exposure: Every year in Ottawa, there are approximately 41 premature deaths related to heat exposure (Pengelly, Cheng, & Campbell, 2005).



Increased risk of injuries and unintended fatalities: Every year in Ottawa there are approximately 350 pedestrian injuries (OPH, 2013).



Increased risk for mental illness: In 2011-2012, 9% of Ottawans reported an anxiety disorder (OPH, 2014).



Research Process

The team completed a series of steps to identify policy opportunities and develop a toolkit. These included:

- 1. Scoping review;
- 2. Reviewed relevant literature:
- 3. Consolidated/ defined the elements;
- 4. Environmental scan of existing toolkits;
- 5. Policy analysis; and,
- 6. Develop recommendations.

Healthy Built Environment Elements

There are many elements that constitute a healthy built environment. Our team focused on elements through which Ottawa Public Health has historically had the most opportunity to influence, namely:

- Urban Form and Community Design;
- Multimodal Transportation and Mobility; and,
- · Natural Environment and Open Spaces.

These elements were amplified by planning principles that address specific topics within the broader elements. Fifteen planning principles are listed, followed by a brief explanation of each principle and direct connections to health outcomes. The elements and principles are listed in no particular order.

Existing Healthy Built Environment Toolkits

Public health professionals have become increasingly involved in providing input on planning policy, as well as reviewing development applications at different levels of government. Additionally, planning institutions have increasingly recognized the impact of planning and the built environment on health outcomes. With this recognition of the connections between public health and planning, municipalities and regions have been developing guidelines and toolkits that provide a framework for conceptualizing the impact of the built environment on health and for incorporating health considerations into planning decisions. Our team reviewed five documents to demonstrate the varied approaches being used to influence health outcomes through the planning process. These toolkits were selected based on their geographic similarity and relevance to the Ottawa policy context:

- Region of Peel Health Background Study User Guide (2011)
- The Halton Healthy Community Guidelines (2012)
- The Middlesex-London Active Community Toolkit for Reviewing Development Plans (2013)
- Building Complete and Sustainable Communities: Healthy Policies for Official Plans (2012)
- The British Columbia Healthy Linkages Toolkit (2014)

Policy Framework

To better understand the policy context guiding planning and decision-making in the City of Ottawa, a range of policy documents were reviewed. This policy framework was then evaluated against criteria collected from our environmental scan of existing healthy community toolkits.

Provincial:

• Provincial Policy Statement, 2014

City of Ottawa:

- Ottawa Official Plan, 2003, and Official Plan Amendment #150, 2014
- Infrastructure Master Plan, 2013
- Transportation Master Plan, 2013
- Pedestrian Plan, 2013
- Cycling Plan, 2013
- Municipal Parking Management Strategy, 2009
- Greenspaces Master Plan, 2006
- Urban Forest Management Plan, in progress
- Community Design Plans
- · Building Better and Smarter Suburbs, 2015
- Complete Streets Implementation Framework, 2013
- Zoning By-law, 2008

Toolkit

The criteria were borrowed from existing toolkits and used to evaluate existing Ottawa policies to determine if there was potential for policies to further support the development of healthy built environments.

We identified 89 opportunities across 15 principles and 3 elements for strengthening City of Ottawa's policies to facilitate healthier built environments in the region. Where the City of Ottawa's policies meet or exceed the criteria, we have suggested ensuring that implementation continues to meet the high standards set out in the policy.

Recommendations

We distilled the 89 policy opportunities in our toolkit into 15 cogent recommendations for policy changes that represent the full spectrum of principles within our three elements of the healthy built environment. These recommendations, found in the following tables, offer opportunities for Ottawa Public Health to provide input in policy review, both in the short and long term.

Urban Form and Community Design			
Principle	Current	Potential	
Encourage Mixed Land Use	The City of Ottawa Official Plan and Community Design Plans do not set targets for land use types to ensure an appropriate mix.	Explore setting targets for land use mixes. Suburban areas could have a mix of: 10-15% of area allocated to public space, 30-70% of area allocated to commercial and employment uses, 50-80% of area allocated to housing.	
Promote Compact Development	The Official Plan currently states "overall residential development will meet a minimum average density target of 34 units per net hectare" for areas in Developing Community Designations (OP 3.12.3).	Explore the implementation of a density range for proposed residential developments between 34-85 units per net hectare.	
Create a Safe Street Network with High Connectivity	Inconsistencies in the maximum range of block lengths have been identified in different City of Ottawa policies.	Blocks in proposed developments could consider not exceeding a certain size, such as 80 m x 150 m.	
Diversify Housing	The Official Plan states that secondary dwelling units are "permitted in all parts of the city" (OP 2.5.2.10).	Strengthen language regarding secondary dwelling units and coach house units to encourage their development and improve housing affordability.	
Prioritize Service Proximity	The Official Plan does not differentiate between school types.	Policies could consider the benefits of differentiating between elementary schools, secondary schools, and post-secondary schools.	
Promote an Inclusive and Accessible Public Realm	The Official Plan is limited and inconsistent in its considerations for public realm features.	Strengthen language to ensure neighbourhoods are designed to include meeting spaces and common areas that address residents' needs, regardless of age and physical ability.	

Multimodal Transportation and Mobility			
Principle	Current	Potential	
Prioritize Pedestrian Safety	The <i>Official Plan</i> does not require sidewalks on a portion of its streets (OP 4.3.9).	Ensure equal consideration for pedestrians on all roads by reducing speed limits and installing traffic calming measures where sidewalks do not exist.	
Encourage Use of Public Transit	The <i>Transportation Master Plan</i> has limited policies to address crime prevention and security.	Incorporate Crime Prevention Through Environmental Design (CPTED) principles more explicitly into transit development and redevelopment plans.	
Promote Walkability and Accessible Pedestrian Infrastructure	Currently, the <i>Official Plan</i> prioritizes traffic calming only in select areas and in general terms (OP 2.2.2.13N).	Strengthen traffic calming policies by establishing criteria for specific traffic calming measures by roadway and zoning type.	
Promote Bicycle Connectivity and Infrastructure	While the <i>OP, TMP</i> , and <i>Cycling Plan</i> encourage and support cycling infrastructure, they could be more specific regarding contexts and tradeoffs with respect to sharrows.	Emphasize that while sharrows are an important step in developing robust cycling infrastructure, higher orders of cycling infrastructure should be encouraged.	
Control Parking Supply	The Official Plan discusses the management of carpools through the Parking Management Strategy, though the final version of the Parking Management Strategy lacks provisions for carpooling (OP 2.3.1.47).	Encourage the designation of parking spaces for the exclusive use of rideshare vehicles.	

Natural Environment and Open Spaces			
Principle	Current	Potential	
Preserve and Connect Open Spaces	Many of Ottawa's policies regarding the Natural Heritage System are considered to be best practices.		
Maximize Opportunities to Access and Engage with the Natural Environment	The Official Plan and Greenspace Master Plan has limited policies to address safety in Parks and Leisure Areas.	Develop an <i>Official Plan</i> policy requiring the inclusion of Crime Prevention Through Environmental Design (CPTED) principles into all phases of the design, review, and approval for new Park and Leisure Areas.	
Reduce Urban Air Pollution	The Official Plan states that "the City will maintain a target for forest cover for the entire city of 30 per cent" (OP 2.5.4.7).	Consider developing minimum canopy standards at a smaller scale (rather than city wide) such as at the neighbourhood level or for each zoned land use.	
Mitigate Urban Heat Island Effect	The Official Plan does not adequately encourage the use of green infrastructure in new development.	Consider developing a mandatory Green Roof By-law for certain types and sizes of development.	