

Creating a Healthier Built Environment in British Columbia

Summary Report

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***Prepared for Dr. John Millar by:
Dr. Lawrence D. Frank
Bombardier Chair in Sustainable
Transportation, School of Community
and Regional Planning,
University of British Columbia***

***Dr. Kim Raine
Director and Professor
Centre for Health Promotion Studies
University of Alberta***

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***The full version of this report with
supporting data and detailed analysis
is available online at:***

***[www.phsa.ca/HealthPro/
PreventionPromoProtect/default.htm](http://www.phsa.ca/HealthPro/PreventionPromoProtect/default.htm)***

***Provincial Health Services Authority
700-1380 Burrard St.
Vancouver, BC
V6Z 2H3 Canada
www.phsa.ca***

Background

Among the factors contributing to the rapid rise of obesity among Canadians, an increasingly large role is being attributed to man-made characteristics of our physical environment – the “built environment” – that influence our level of physical activity and our dietary choices. As the research evidence grows, policy-makers and practitioners have called for broad environmental interventions to address these “obesogenic” (obesity-promoting) factors of our built environment.

Based on a review of the best available research, the purpose of this report is to identify and assess a number of changes related to the built environment that can effectively address these obesogenic factors and promote healthy body weight at a population level through increased physical activity and improved nutrition.

Key Findings

The health effects of the built environment are complex.

The built environment can influence physical activity, nutrition and obesity, and can contribute to air pollution and increased rates of injury. Addressing this complex issue requires complex solutions involving many stakeholders and decision-makers.

There is sufficient evidence to take action now.

Immediate action is warranted, and should be accompanied by evaluation and research to determine which measures are most and least effective.

The best available evidence supports the following interventions:

- Increase urban residential density
- Increase land use mix
- Increase road and pathway connectivity to promote walking and cycling
- Increase public transit
- Increase the availability of recreational facilities and parks including bike lanes and paths
- Enhance streetscape design to improve aesthetics and safety for pedestrians and cyclists
- Improve physical access to healthy foods and discourage junk foods through zoning and neighbourhood design where needed to support grocery stores, farmers’ markets and restaurants

Overview of Findings

The research supports making changes to our built environment

The majority of research reviewed for this report finds a clear relationship between the built environment, physical activity and body weight. Based on existing evidence, the conclusion of this review is there is strong support for making changes to the built environment to help promote healthy body weight and improve population health.

Walkable neighbourhoods are associated with changes in travel behaviour

Walkable neighbourhoods – neighbourhoods that are compact (high density), with an interconnected network of streets and a mix of land uses – are associated with statistically significant changes in travel behaviour, i.e. less driving and more walking, cycling and use of public transit.

Walkable neighbourhoods are associated with lower body weights

Personal travel patterns influence a person's physical activity levels. The current evidence shows that people located in more walkable areas are less likely to be obese and more likely to meet recommended levels of daily physical activity.

Increased density is associated with less pollution

People in compact, well-serviced neighbourhoods are less likely to drive, produce less greenhouse gases and consume less energy per capita. Such neighbourhoods are also accessible to a wider range of family types and household incomes. For low-income households, increased density offers an important economic benefit by making it possible to forego car ownership.

Pedestrian-friendly streetscapes encourage physical activity

Areas that are safe and attractive for pedestrians encourage higher rates of physical activity. Furthermore, the visible presence of pedestrians and cyclists has been linked to promoting higher rates of physical activity, presumably because people notice the prevalence of such behaviour in the area and feel encouraged to participate.

Pedestrian-friendly streetscapes are associated with fewer traffic accidents and less crime

Narrower streets and streets with marked pedestrian crossings help to slow traffic. Features such as landscaping, sidewalks, and parallel parking can further enhance pedestrian safety by increasing driver awareness. Such streets are also associated with lower rates of crime.

Public transit encourages physical activity

As most public transit trips involve walking links, the existence of good public transit service helps promote physical activity. Furthermore, improved public transit service may achieve the greatest health benefits for low-income individuals.

The built environment influences nutrition

The built environment can contribute to poor diet through the absence, in some communities, of local (within walking distance) food retailers and restaurants offering a good selection of nutritious food.

Improving the food environment can improve nutrition

The local food environment can be improved through zoning to increase the number and quality of food retailers and restaurants in underserved areas. Food policy can improve nutrition by reducing or eliminating high-fat and high-sugar foods in institutional settings such as schools.

Further Considerations

Opportunities for changing the built environment

These include increasing density in existing mixed-use centres, bringing other land uses into neighbourhoods that are currently residential-only, increasing the connectivity of street and trail networks, and improving the appearance and safety of streetscapes.

On the transportation side, research suggests that improved population health may be achieved through increased investments in bicycle, pedestrian and transit facilities and services.

To increase access to healthy food choices, vacant parcels of land, particularly in neighbourhoods that lack healthy food choices, could be purchased or temporarily used for community food gardens. In neighbourhoods lacking grocery stores, it may be expedient to have developers secure grocery stores or food markets as tenants as a condition for approval of new developments.

Changes to the built environment require significant time to show benefits

Because land use development takes place parcel-by-parcel, it can take time to see new regulations implemented, especially in areas where compact, mixed-use neighbourhoods are a departure from the norm. Furthermore, there is an indirect relationship between land use and physical activity. Once land use patterns change it may take time for the corresponding change in people's behaviours and the desired outcomes – increased physical activity and reduced obesity – to occur.

A collaborative focus on population health is crucial

Translating research into policy and action requires the commitment and cooperation of many players from a variety of areas to understand the issues, brainstorm policy solutions, and oversee the implementation of recommended changes. As new policies are implemented it is also essential to monitor their effects to assess whether the desired outcomes are achieved and, if not, what further changes are needed.

Public health representatives should be fully engaged in planning processes

Given the significant health impacts related to land use, it is increasingly necessary for public health agencies to be engaged in the land use planning process. Explicit consideration of a population's health, safety and welfare should be included in the evaluation of land use planning alternatives and development proposals.