



Photo of Seaside Greenway in Vancouver, B.C. / City of Vancouver



WILLAMETTE PARTNERSHIP

Vancouver, B.C.

Health and Outdoors Opportunities Assessment

More Access to Green Space, Better Health

Did you know that your environment (socio-economic, cultural, and physical) determines more of your health than your genetic code? Where and how we live in and around Vancouver makes a difference in how long we live and the cost of our healthcare. When more people have access to trees, trails, parks, and other natural areas, there are measurable improvements in mental health, physical activity, social cohesion, air quality and other social determinants of health (See Fig. 1). **This document is meant to stimulate discussion and collaboration on the topic of green space and health with the ultimate goal of working together to plan, build and maintain green spaces in ways that promote better health.**



Figure 1. Social determinants of health refer to the conditions in which we are born, grow, live, and work. Health organizations are increasingly looking upstream to these determinants to create community wellness, prevent chronic disease, and increase health care effectiveness.

COMMUNITY HEALTH NEEDS RELATED TO GREEN SPACES FOR VANCOUVER

Green spaces can provide places for physical activity, stress reduction, community connectedness, urban agriculture, and reprieve from noise, poor air quality, and excessive heat^[1]. Accumulating evidence shows the beneficial effects of green space on mental health, cognitive development, cardiovascular morbidity, type II diabetes, pregnancy outcomes, and mortality^[1]. Research suggests that access to quality green space can be particularly beneficial for the lowest socioeconomic groups, pregnant women, and children^[1].

- At the national level, the Chief Public Health Officer highlighted obesity, diabetes, and mental health issues as a concern for Canadians^[2].

[1] World Health Organization (WHO). (2016). Urban green spaces and health [Review]. Retrieved March 8, 2018 from http://www.euro.who.int/__data/assets/pdf_file/0005/321971/Urban-green-spaces-and-health-review-evidence.pdf?ua=1

[2] Public Health Agency of Canada. (2017). The Chief Public Health Officer's Report on the State of Public Health in Canada 2017: Designing Healthy Living [Report]. Retrieved March 8, 2018 from <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/chief-public-health-officer-reports-state-public-health-canada/2017-designing-healthy-living/2017-designing-healthy-living-eng.pdf>

- Vancouver Coastal Health's *My Health My Community* survey reported^[3]:
 - 18% of Vancouverites have experienced mood or anxiety disorders
 - Only 46% of Vancouverites are partaking in 150+ minutes of weekly physical activity
 - 54% of Vancouverites have a strong sense of community belonging
- A [review](#) commissioned by the BC Centre for Disease Control found that green space may have a stronger positive influence on the health of lower socioeconomic status individuals, and may help narrow some health disparities between higher and lower income groups^[4].

OPPORTUNITIES TO LINK GREEN INFRASTRUCTURE TO HEALTH

A number of activities are already being conducted by the City of Vancouver, Vancouver Coastal Health and other key stakeholders to improve access to, and the quality of, green space in the city:

- Vancouver Coastal Health's Healthy Built Environment team works to collaborate with local government and key partners to create environments that promote and protect health.
- The B.C. Centre for Disease Control released a [fact sheet](#) highlighting the importance of protecting and improving equitable access to healthy, natural environments to support physical and mental health^[5].
- The City of Vancouver and Vancouver Coastal Health have been working together in partnership through the [Healthy City Strategy](#) to provide opportunities for Vancouverites to live actively and get outside, and to create environments to thrive in^[6].
- The City of Vancouver's [Greenest City Action Plan](#) and long-term [Climate Change Adaptation Strategy](#) emphasize investment in green space and trees and green infrastructure to manage stormwater flows and quality and to mitigate heat stress experienced by residents^{[7],[8]}.
- The City of Vancouver has already invested in 190 green infrastructure practices in the public realm, with more than 60 additional planned future projects.
- GreenCare's [Climate Resilience & Adaptation Program](#)^[9] works collaboratively to co-develop adaptation options for reducing extreme heat and flood risks on and around health campuses. Key resources, such as design guidelines with resilience principles and practices, are informed by and shared with all BC health authorities to reduce and better prepare for the risks and impacts linked to, for example, increasing temperatures, wildfire exposure, and sea levels.

[3] My Health My Community. (2014). Vancouver Community Health Profile. Retrieved March 8, 2018 from http://www.myhealthmycommunity.org/Portals/0/Documents/Community%20Profiles/Vancouver_final.pdf

[4] BC Centre for Disease Control (BCCDC). (2017). FACT SHEET: Supporting Health Equity Through the Built Environment [Fast Sheet]. Retrieved March 8, 2018 from http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/EH/BCCDC_equity-fact-sheet_web.pdf

[5] BC Centre for Disease Control (BCCDC). (2016, June). Working with local governments to support health equity through the built environment: A scoping review [Review]. Retrieved March 8, 2018, from <http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/EH/Equity%20BE%20Scoping%20Review.pdf>

[6] City of Vancouver. (2018, February 02). Healthy City Strategy: our goals. Retrieved March 08, 2018, from <http://vancouver.ca/people-programs/healthy-city-strategy.aspx>

[7] City of Vancouver. (2012). Greenest City Action Plan. Retrieved March 09, 2018 from <http://vancouver.ca/files/cov/Greenest-city-action-plan.pdf>

[8] City of Vancouver. (2012, November 07). Climate Change Adaptation Strategy (Strategy). Retrieved March 8, 2018, from City of Vancouver website: <http://vancouver.ca/files/cov/Vancouver-Climate-Change-Adaptation-Strategy-2012-11-07.pdf>

[9] Vancouver Coastal Health, Fraser Health, Provincial Health Services Authority and Providence Healthcare each have a [sustainability policy and framework](#) for increasing and improving green infrastructure, among other strategies, in a changing climate. The Climate Resilience & Adaptation program is a part of a consolidated department, *Lower Mainland Facilities Management*, that underpins health organizations' services delivery to over 62% of BC's population.

Continued work and improved collaboration have the opportunity to enhance quality green space and improve health outcomes. Some recommended actions could include:

- Work collaboratively across sectors between the health authority, City of Vancouver, and other interested parties to incorporate the planning principles listed in the Provincial Health Services Authority's [Healthy Built Environment Linkages Toolkit](#)^[10].
- Work to expand and improve accessible and connected green spaces in underserved and disadvantaged areas to support physical and mental health⁴ using vulnerability assessments to identify neighbourhoods in need.
- Incorporate Vancouver Coastal Health's clinics, hospitals, community centres and other health campuses in discussions about improvements to green space and incorporation of green infrastructure.
- Incorporate community input into the planning, design, and implementation of green spaces in neighbourhoods.
- Identify indicators and monitoring programs that could be used to evaluate the benefits of green infrastructure to reduce the urban heat island effect.

[10] BC Centre for Disease Control (BCCDC). Healthy Built Environment Linkages Toolkit: making the links between design, planning and health, Version 2.0. Vancouver, B.C. Provincial Health Services Authority, 2018, from http://www.bccdc.ca/pop-public-health/Documents/HBE_linkages_toolkit_2018.pdf

CONTACTS

Green Stormwater Infrastructure Contact

Cameron Owen, Planning Policy Lead, Rain City Strategy
City of Vancouver
cameron.owen@vancouver.ca
604-296-2978

Sustainability Contact

Brad Badelt, Assistant Director, Sustainability Group
City of Vancouver
brad.badelt@vancouver.ca

VCH Health Protection – Healthy Built Environment Contact

604-675-3800

Climate Resilience & Adaptation Program Contact

Angie Woo, Program Lead
Energy & Environmental Sustainability
Lower Mainland Facilities Management
angie.woo@fraserhealth.ca