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Ten Healthy Built Environment Tools for Local Governments

Campbell River, B.C.
Source: Province of BC

Healthy People

Healthy Society

Healthy Environments

Purpose of this Guide

This guide is designed to support local governments, including Indigenous communities, with assessing features of their community's built environment. Ten validated healthy built environment assessment tools have been compiled and are presented in this guide. These assessment tools, when paired with community engagement efforts and health data, will support local governments in identifying the strengths and gaps in their community's built environment and further understand how those gaps might negatively impact health. Local governments can then work with their regional health authority or the First Nations Health Authority to prioritize actions and create healthier communities through healthier built environments.

About Us

BC Healthy Communities Society

BC Healthy Communities Society (BCHC) is a province-wide, not-for-profit organization that facilitates the ongoing development of healthy communities for all. Adapting the World Health Organization's Healthy Cities/ Healthy Communities pillars for healthy communities, BCHC works with partners who span the social, environmental, economic, and political spectrum to help create places that promote livability and well-being. We provide planning services, programs, and resources that support collaboration between local governments, health authorities, and multi-sectoral partners.

The **PlanH program** is administered by BC Healthy Communities Society, on behalf of the BC Ministry of Health. The program facilitates local government learning, partnership development and planning for healthier communities in the environments where we live, learn, work and play. Working together with health authorities, the Union of BC Municipalities, and the Ministry of Health, PlanH supports the Province of British Columbia's health promotion strategy.

Vancouver Coastal Health's Healthy Built Environment Team

Vancouver Coastal Health's Healthy Built Environment (HBE) team provides support to local communities in the planning and design of our built environments to promote health and well-being. The communities we serve span from Vancouver, Richmond, North and West Vancouver and along the Sea-to-Sky Highway, Sunshine Coast and BC's Central Coast.

The team consists of two environmental health officers working regionally on HBE issues, a Manager for Health Protection, a Medical Health Officer, and an Environmental Health Scientist. The HBE team works closely with the Population Health team and local district and senior environmental health officers within our communities to provide local context and perspective.

The HBE team works with local governments and key partners in communities to encourage and facilitate the inclusion of health and well-being into planning policies, guidelines, processes and decisions. Activities range from participation in high level policy initiatives, reviewing specific planning proposals, taking part in impact assessments, to knowledge translation of health evidence. The team uses a holistic perspective that considers the long-term health impacts related to people's living environments. The team considers impacts on the physical, mental, emotional, and social health and well-being of our populations.

Kimberley, B.C.
Source: Province of BC

Ten Healthy Built Environment Assessment Tools for Local Governments

CONTENTS

Background

What is a healthy built environment?

The built environment consists of the physical structures and human-made environments in which people live, work, play and socialize.[1] The concept of healthy built environments (HBE) can be considered through a holistic perspective that includes five key built environment areas:[2]

1. Neighbourhood design
2. Transportation networks
3. Natural environments
4. Food systems
5. Housing

The design of the built environment, as well as the relationship between the built environments and how people interact with these environments, plays a significant role in influencing human health and well-being. The way built environments are designed can impact a number of factors that influence health, such as:

- Health behaviours (e.g. physical activity, use of active transportation, healthy diets, social connections);
- Injury prevention and safety (including perception of safety);
- Environmental exposures (e.g. noise, air quality, heat, and other exposures resulting from climate change); and,
- Equitable access to services and spaces (e.g. natural environment, housing, public transportation).

These factors have been shown to contribute to health and well-being, including its physical, mental, and social aspects.

Local governments have immense power to influence health through the design of the built environment. These decisions can have profound economic co-benefits: built environments that encourage physical activity, for example, can help reduce the estimated $1.6 billion spent annually by Canada's health care system as a result of physical inactivity.[3] Positive economic impacts of healthy built environments can also be realized on the local government level, through benefits such as:

- Reduced utility servicing costs that come with reduced sprawl;[4]
- Reduced legal costs due to fewer personal injury lawsuits; and,[5]
- Reduced policing and victim services costs due to crime prevention through environmental design (CPTED).[6]

Equity and the built environment

Features of the built environment that negatively impact health and well-being are known to disproportionately affect people in lower socioeconomic positions, by virtue of where they live.[7] This is why it is important that equity is considered when assessing the built environment and its impacts on health and well-being. Some questions that can be asked to support health equity through the built environment are:

- Are there members of the community who are disproportionately being impacted by the built environment?
- Do certain areas of the community have more health-promoting built environments than others?

Resources such as Supporting Health Equity through the Built Environment can help local governments incorporate healthy, equitable built environment principles into their planning processes.

Why use an HBE assessment tool?

Given the significant impact that built environments have on health and well-being, it is crucial that local governments and their communities assess features of their community's built environment to determine how those features might be affecting the health of their community's residents and visitors. For local governments and communities, it can be challenging to choose which built environment features to target for enhancements or for future developments. To support local governments with this challenge, an array of HBE assessment tools have been developed—many of which have been validated.[8]

Assessment tools that are introduced in this guide fall into two categories:[9]

1. Systematic observation or audit tools; and,
2. Interview or self-administered questionnaires.

What are the advantages of using an HBE assessment tool?

These assessment tools can support local governments in identifying the strengths and gaps in their community's built environments and how those gaps might negatively impact health. Community involvement could help local governments identify what barriers exist and what actions are required to address them. The assessment tools can be particularly useful to engage the community and gather public input during planning and decision-making processes. It is important to create opportunities for all community members to participate and be fully engaged in the process in an equitable manner. As part of this integrated planning process, local governments can then collaborate with their regional health authority or the First Nations Health Authority, to prioritize actions and discuss potential health concerns connected to the built environment.

The tools can also be used to evaluate existing and new infrastructure, plans or policies. For instance, the use of HBE assessment tools can help address the question: have changes that have been made to the built environment helped to improve health and well-being for some community members? Continuous evaluation is important in monitoring progress and can help influence revisions in existing plans and policies to further improve healthy built environments.

What are the limitations of using an HBE assessment tool?

HBE assessment tools focus on our physical environments, so they do not give information about all of the other determinants of health. Therefore it is important to partner with the health authority staff in your region to collaboratively identify other factors, beyond the built environment, that might be affecting health and well-being in the community.

HBE assessment tools vary in the types of domains, indicators, and criteria used to assess the built environment. Some tools are intended for assessing existing built environments, while some are meant to assess proposed changes to built environments. Due to the range of tools available, local governments and communities may select more than one tool.

What is an equity lens?

Equity is the fair distribution of opportunities, power, and resources to meet the needs of all people, regardless of age, ability, gender, culture or background.

Applying an equity lens means asking who will benefit from a policy, program, initiative or service, but also who may be excluded from the benefits and why. How might some population groups be unfairly burdened today or in the future?

An equitable planning and development process reaches community members who may not contribute regularly to local planning and decision-making, and will therefore result in strategies that are more responsive to local needs.

There are several tools and resources available to help apply an equity lens to planning work. Here are a few to consider:

- Advancing Equity and Inclusion: A Guide for Municipalities
- Health Equity and Community Design: What is the Canadian Evidence Saying?
- Health Equity Guide: A Human Impact Partners Project
- Supporting Health Equity Through the Built Environment

Comparing the ten HBE assessment tools

The chart below compares the ten tools introduced in this guide.

Type of Tool	Types of Data Collected	Use when you need to...	Advantages	Limitations	Tools Highlighted in this Guide
Section I: Systematic Observation (Audit)	• observations • measurement of specific aspects at a microscale (e.g. parks, trails, streets)	• provide evidence-based policy recommendations to decision-makers • identify or prioritize strengths with the built environment or changes that might be needed	• provides data on unique aspects of the built environment • tools are available for particular population groups (e.g. youth, seniors) • tools can be tailored to suit the specific needs & contexts of rural areas & small communities	• requires some logistical planning • need to train data collectors / observers • potential cost & time barriers	Active Community Toolkit for Reviewing Development Plans Healthy Development Assessment Tool Metrics for Planning Healthy Communities Rural Active Living Assessment Tool The Built Environment Assessment Tool & Manual
Section II: Self-Administered Questionnaire	• perceptions of the qualities of the built environment • self-reports	• provide information about the ways that people live, work and play in their environments • need to engage the community and learn about their ideas and perspectives	• offers unique information on the built environment	• large sample size is needed • variable response rate	Place Standard Tool Bikeability Checklist Walkability Checklist Community Health Quick Audit Healthy Active by Design Guide to Healthy Streets Indicators

SECTION I: SYSTEMATIC OBSERVATION (AUDIT) TOOLS

Systematic observation tools (or audits) aid in analyzing the built environment features of a neighbourhood, park, road stretch, or trail. Trained observers collect the data to record built environment features at pre-determined observation points. Data collectors fill out a checklist of several objective measures of the built environment using a validated tool. The audit makes it possible to develop a profile of the site visited.

Measures from audits often include:[10]

- the physical features of buildings;
- the presence and condition of infrastructure linked to biking, walking (sidewalks, traffic-calming measures, greenness, lighting, incivilities, park and trail cleanliness, road markings, etc.); and
- the presence and condition of equipment (e.g., play structures, loan counters).

Advantages of using systematic observation tools include:[11]

- The tools provide data on unique aspects of the built environment that can influence community health and well-being outcomes, including appearance, atmosphere, quality.
- Tools have been developed for specific categories of the population, such as youth or seniors, thus allowing local governments to include more community members in the processes.
- Audit tools can be tailored to suit the specific needs and contexts of both urban communities and rural or small communities

Limitations of using systematic observation tools include:[12]

- Observations require some logistical planning, such as site selection (sample), observer training, data collection, data management, and data analysis.
- Data collection training is necessary to ensure consistency in the observations.
- There can be cost- and time-related barriers for implementing observation tools.
- Several observation points are required to establish an accurate profile for an area.

Tools Legend

Suitable for use in small/ rural communities

Suitable for use in urban communities

EXPLORE THE TOOLS >>

Active Community Toolkit for Reviewing Development Plans[13]

The purpose of the Active Community Toolkit for Reviewing Development Plans is to assist public health professionals, such as regional health authorities' Healthy Community and/or Healthy Built Environment teams to provide valid and standardized input to encourage active community design when reviewing development plans submitted to a local government.

Local government staff such as planning, design, transportation, transit, engineers, parks and recreation and developers may be interested in using this toolkit to ensure and/or advocate for the design of healthy built environments that encourage active living.

This tool can be used to assess the active community design elements incorporated into a development proposal. The tool supports the assessment of development proposals across four key domains and 15 sub-domains.

Domains/Features of Built Environment Being Assessed

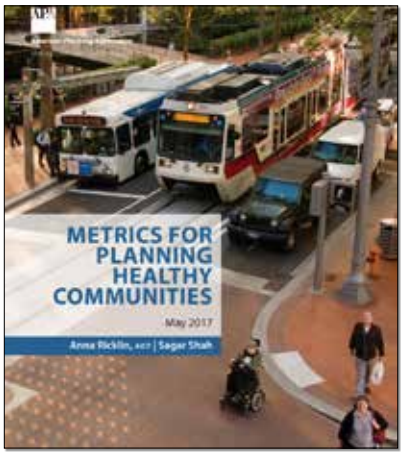
1. **Mixed Land Use**
   - Land Use
   - Density
   - Service Proximity
   - Employment Proximity
   - Educational Proximity
2. **Mixed Housing**
   - Housing Density and Diversity
3. **Complete Streets**
   - Street Design
   - Pedestrian Oriented
   - Cycling Oriented
   - Public Transit
   - Streetscape and Aesthetics
   - Parking
4. **Public Realms**
   - Parks, Open & Recreation Spaces
   - Safety and Surveillance

Advantages

- Supports public health and healthy built environment professionals in forging a partnership with local governments.
- Supports the integration of active community design elements in the development approval process.
- Easy to use – the assessment consists of questions that mostly start with "Does the plan..." and the reviewer either answers YES, NO or Not Applicable (N/A). Words are underlined to emphasize what aspect of the built environment is being evaluated.
- Can be used to assess site plans, area plans, and subdivision plans submitted to a local government. This standardized assessment tool encourages local governments and public health/healthy built environment specialists to integrate healthy built environment and active design principles into the proposal review process.

Limitations

- It is assumed that each development application should strive to include active community features as fundamental design principles.
- Not all criteria may be applicable to all development plans.
- A limited amount of information on the validity and reliability of the tool.
- May not be applicable to rural or small communities



Metrics Planning for Healthy Communities[14]

The Metrics for Planning Healthy Communities, developed by the American Planning Association, utilizes existing indicators systems, indexes, interactive maps, and literature to provide planners with metrics that can be used to assess, measure, monitor, and report on progress for healthy community planning. Equity is interwoven into the tool to ensure planners also integrate an equity lens into their practice.

This tool is useful for local governments. It supports strengthened multi-sectoral collaboration and integrates health into planning practice and decisions. The tool can be used to assess the built environment across five domains and 14 subdomains, and it supports the implementation of evidence-based policies that integrate health into community planning.

Domains/Features of Built Environment Being Assessed*

1. Active living
2. Healthy food systems
3. Environmental exposure
4. Emergency preparedness
5. Social cohesion

*The above domains were selected based on the criteria of relevance to the field, magnitude of impact, the feasibility of measuring, equity, and ability to change.

Advantages

- Provides an inclusive approach, going beyond traditional planning metrics
- Provides actionable guidance by providing planners with guidance for actionable policies
- Provides clear direction by providing planners with metrics that are succinct, simple, and workable
- Provides equity considerations

Limitations

- This tool may not be useful for small or rural communities.

Healthy Development Assessment Tool[15]

The Healthy Development Assessment Tool was developed for use by those who play a role in the planning, design, and approval of developments. There are two versions of the Healthy Development Assessment Tool - one for large scale projects and one for smaller scale projects. Both tools assess and score development proposals across six core elements of the built environment.

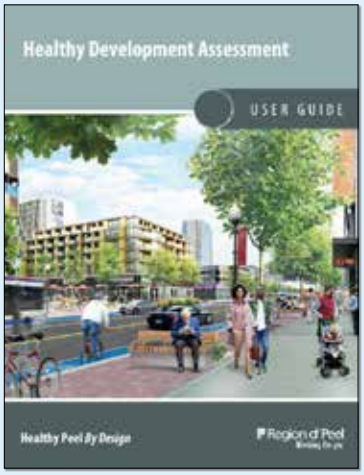
This tool is suitable for use by local governments, including planners and developers. The tool can assist planning and development stakeholders in creating healthy, supportive environments, and measure the health-promoting potential of a planning or development proposal.

Advantage

- Works within existing planning policies, regulations, and standards, with which all developers should comply.
- Tailored assessments for the size of development (large- vs small-scale)
- User guide makes the tool easy to understand and administer.

Limitations

- The tool is not meant to be applied alone as a means for approving or rejecting development proposals. Rather, it is an informative component of the application evaluation process.
- Equity considerations are not expressed.



Domains/Features of Built Environment Being Assessed

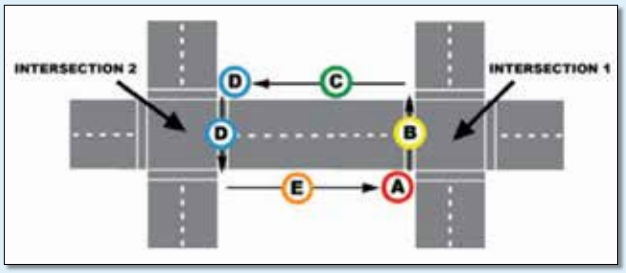
1. Density
2. Service proximity
3. Land use mix
4. Street connectivity
5. Streetscape characteristics
6. Efficient parking

The Built Environment: An Assessment Tool & Manual[16]

The Built Environment: An Assessment Tool and Manual (BE Tool) is a systematic observation data collection tool for assessing the core features and quality of the built environment, as they relate to behaviours that affect health, such as walking, biking, and other types of physical activity. The BE Tool was not designed to assess every aspect of the built environment. Instead, the tool assesses a core set of features agreed upon by subject matter experts to be most relevant. The tool provides some flexibility as additional questions or modules could be added by users if more detail about an aspect of the built environment is desired.

Domains/Features of Built Environment Being Assessed

1. Built environment infrastructure
2. Walkability
3. Bikeability
4. Recreational sites and structures
5. Food environment



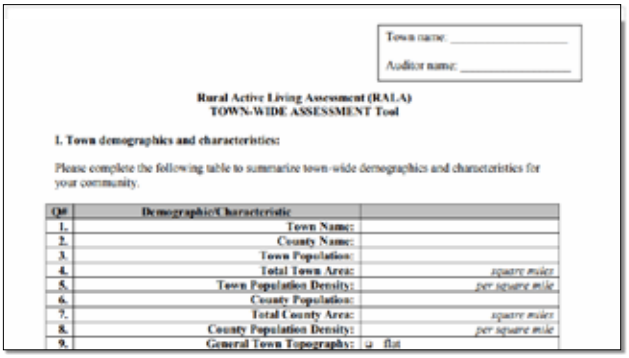
Advantages

- Additional questions can be added by users if more detail about an aspect of the built environment is needed (e.g. Nutrition environment, pedestrian environment)
- User guide explains how to train data collectors (raters)

Limitations

- Does not give direction on how to implement built environment/policy changes to combat poor ratings.

Rural Active Living Assessment (RALA) Tools[17]


Town name: _____
Auditor name: _____

Rural Active Living Assessment (RALA)
TOWN-WIDE ASSESSMENT Tool

1. Town demographics and characteristics:

Please complete the following table to summarize town-wide demographics and characteristics for your community.

Q#	Demographic/Characteristic	
1.	Town Name:	
2.	County Name:	
3.	Town Population:	
4.	Total Town Area:	square miles
5.	Town Population Density:	per square mile
6.	County Population:	
7.	Total County Area:	square miles
8.	County Population Density:	per square mile
9.	General Town Topography:	flat

The Rural Active Living Assessment (RALA) tools assess a variety of features, including the physical environment and amenities available,, town characteristics, community programs, and policies that can affect physical activity among residents in rural communities.

These tools are useful for small or rural community local governments, planners, healthy built environment specialists, and health authority staff working with small or rural communities.

Domains/Features of Built Environment Being Assessed

The RALA tool includes three separate components:

1. Town-Wide (18 town characteristic questions and inventory of 15 recreational amenities)
2. Program and Policy (20 questions)
3. Street Segment (28 questions) Assessments

These three assessment instruments are designed to be used together and provide a comprehensive measure addressing many of the unique factors believed to be important to active living in rural communities.

Advantages

- Rural focused
- Assesses built environment, amenities, and policies

Limitations

- Not relevant for urban communities

SECTION II: SELF-ADMINISTERED QUESTIONNAIRES

Self-administered questionnaires can be used to collect data about people's experiences in the built environment. Data can be collected by phone, mail, through face-to-face interviews, online or through walk-abouts in the community. These tools capture individual perceptions, which can have a significant impact on individuals' decisions to take part in physical activity, use active transportation modes, and engage in other health-promoting behaviours.[18]

Advantages of using self-administered questionnaire tools include:

- Perception-based data offers exclusive information on the built environment – such as its uses and functionality in practice. Perception-based data can indicate why there is a low activity rate in a built environment considered favourable based on data gathered from other methods, such as systematic observation tools.

Limitations of using self-administered questionnaire tools include:

- To create a high-quality profile on a site, a large sample size is needed. This can add to costs and time. However, this tool could be more suitable for smaller or rural communities where population sizes are smaller.
- Recruiting questionnaire respondents can be challenging and response rates can vary. To mitigate this, it is recommended to use shorter questionnaires, which can yield higher response rates.[19]
- While variability in perceptions is generally constant for questions around the presence of a built environment feature. Individual perceptions around features such as perceived crime rate or safety can vary.[20]

Tools Legend

Suitable for use in small/ rural communities

Suitable for use in urban communities

EXPLORE THE TOOLS >>

Walkability & Bikeability Checklists[21,22]

The Bikeability Checklist and Walkability Checklist allow individual community members, active transportation advocates, and local governments to assess how bikeable or walkable their neighbourhoods are. Individuals can go on their route to work, school, running errands, or where ever else they enjoy biking or walking to and use the checklist to measure bikeability or walkability and then advocate for change based on the score.

Domains/Features of Built Environment Being Assessed

1. Bikeability
2. Walkability

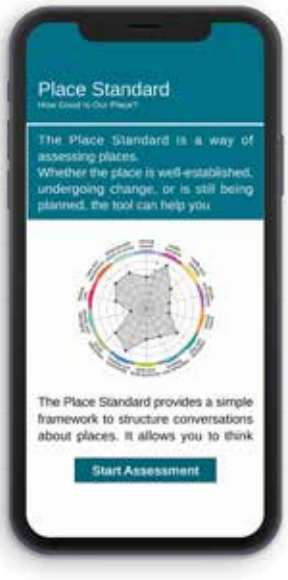
Advantages

- Easy to use
- A great tool for getting community members involved in active transportation and built environment assessments and advocacy.

Limitations

- Likelihood of policy changes and/or built environment changes to result from this tool is low.
- Does not give direction on how to implement built environment/policy changes to combat poor ratings.

Place Standard Assessment Tool[23]



Above: The Place Standard Tool is available as a smartphone app.

The Place Standard Assessment Tool is a tool to assess the quality of places—whether they are new, well-established, or still being planned. The tool consists of 14 questions spanning the physical and social elements of a place. Answers are plotted on a simple diagram.

This tool can easily be used by community members, local government planners, healthy built environment specialists, and other public health / healthy communities staff in health authorities. The tool can be used in paper copy or by downloading the Place Standard Tool app.

Domains/Features of Built Environment Being Assessed

1. Moving around
2. Public transport
3. Traffic and parking
4. Stress and spaces
5. Natural space
6. Play and recreation
7. Facilities and amenities
8. Work and local economy
9. Housing and community
10. Social contact
11. Identity and belonging
12. Feeling safe
13. Care and maintenance
14. Influence and sense of control

Advantages

- There is a Place Standard App for Apple/Android phones—making it easy to access and utilize.
- Visual diagram allows the user to instantly see strengths/weaknesses.

Limitations

- More of a tool to guide conversations than policy actions.

Community Health Quick Audit[24]

The Community Health Quick Audit tool was designed to provide communities with an easy tool with which to assess their community's health with regard to built environment features that encourage physical activity and access to healthy foods. Local governments, planners, or even community members can use this tool to quickly assess built environment features that encourage active living and healthy eating in a smaller town.

Domains/Features of Built Environment Being Assessed

1. Walkability
2. Connectivity
3. Bikeability
4. Playability
5. Placemaking
6. Wayfinding
7. Food markets
8. Healthy grocery stores
9. Small growing spaces
10. Incentivize farming
11. Rural transportation

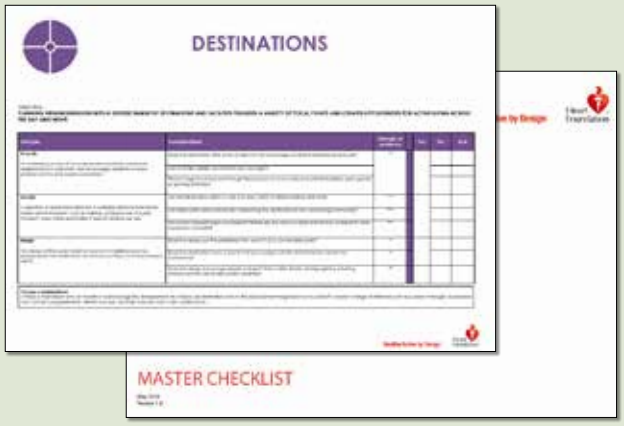
Advantages

- Appropriate for use in small and rural communities
- Quick and easy to use

Limitations

- Does not give direction on how to implement built environment/policy changes to combat poor ratings.

Healthy Active by Design[25]



The Healthy Active by Design master checklist aims to create developments that encourage physical activity and support positive health outcomes. The tool promotes collaboration between government agencies, land developers, and the community—as each has an important role to play in healthy community development.

Domains/Features of Built Environment Being Assessed

1. Destinations
2. Housing Diversity
3. Movement Networks
4. Public Open Space
5. Sense of Place
6. Community Facilities
7. Buildings
8. Healthy Food

Advantage

- Evidence-based—connects indicators to the strength of evidence.

Limitations

- Does not give direction on how to implement built environment/policy changes to combat poor ratings.

Guide to the Healthy Streets Indicators[26]

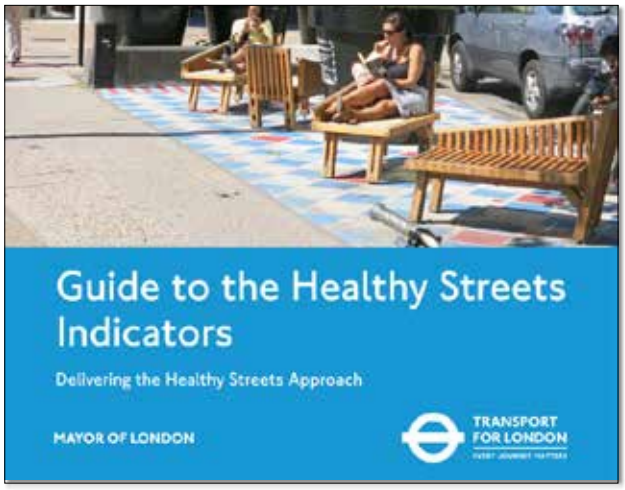
The Guide to the Healthy Streets Indicators tool is based on the Healthy Streets Approach and uses 10 indicators of healthy streets to assess and inform decisions about how we design, manage and use public spaces. The end goal is to make streets healthy, safe, and welcoming for everyone.

Domains/Features of Built Environment Being Assessed

1. People choose to walk, cycle, and use public transport
2. Pedestrians from all walks of life
3. Easy to cross
4. People feel safe
5. Things to see and do
6. Places to stop and rest
7. People feel relaxed
8. Not too noisy
9. Clean air
10. Shade and shelter

Advantage

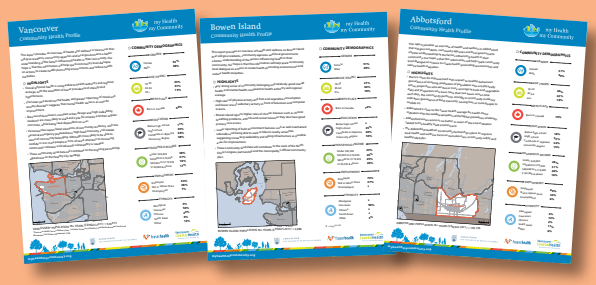
- Easy to use and implement



Limitations

- Open-ended questions
- No systematic rating system
- Does not give direction on how to implement built environment/policy changes to combat poor ratings
- Urban-focused

My Health My Community



Above: Community profiles from the My Health My Community website.

My Health My Community (MHMC) is a health and wellness survey that gives residents the opportunity to help influence their community's health priorities by providing a local-level perspective on health and wellness.

This initiative was created through a joint partnership between Vancouver Coastal Health, Fraser Health, and the UBC Faculty of Medicine e-Health Strategy Office.

Gathering health information is a vital step in planning, delivering, and evaluating local health programs and policies. In order to appropriately develop, implement and evaluate local-level programs and policies, an accurate understanding of community health status, needs and well-being is crucial.

Built environment is one of the indicators of health and well-being in the MHMC that is used to gather information about the health status and health needs of the local population.

This survey is a great example of local health data collection that can be used by local governments, healthcare decision-makers, academia, and community stakeholders to collaboratively tackle health inequalities and shape community services and amenities to meet local needs.

For more information, visit the MHMC website at: www.myhealthmycommunity.org

References

1. Dearry, A. (2004). Editorial: Impacts of our built environment on public health. Environmental Health Perspectives; 112(11):A600.
2. BC Centre for Disease Control. (2018). Healthy built environment linkages toolkit: Making the links between design, planning and health, Version 2.0. Vancouver, B.C. Provincial Health Services Authority. http://www.bccdc.ca/health-professionals/professional-resources/healthy-built-environment-linkages-toolkit
3. Katzmarzyk, PT and Janssen, I. (2004). The economic costs of physical activity and obesity in Canada an update. Canadian Journal of Applied Physiology, 29(1), 90-115. https://www.nrcresearchpress.com/doi/10.1139/h04-008#.XJ1mZxNKgXo
4. Union of BC Municipalities, BC Recreation & Parks Assn, & Provincial Health Services Authority (2009). Foundations for a healthier built environment. http://www.bccdc.ca/pop-public-health/Documents/foundations-summary.pdf
5. Ibid.
6. City of Victoria. (2004). Crime prevention through environmental design guidelines. https://www.victoria.ca/assets/Departments/Planning~Development/Development~Services/Documents/regulations-crime-prevention-environmental-design.pdf
7. Gelormino, E., Melis, G., Marietta, C. & Costa, G. (2015). From built environment to health inequalities: An explanatory framework based on evidence. Preventive Medicine Reports;2:737-745.
8. National Center for Chronic Disease Prevention and Health Promotion. (2015). The built environment: An assessment tool and manual. Division of Community Health. https://www.cdc.gov/nccdphp/dnpao/state-local-programs/built-environment-assessment/pdfs/BuiltEnvironment-Main.pdf
9. Brownson, R. C., C. M. Hoehner, K. Day, A. Forsyth and J. F. Sallis (2009). Measuring the built environment for physical activity: state of the science. American journal of preventive medicine, vol. 36, n° 4 Suppl, p. S99.
10. Institut national de santé publique du Québec. (2014). The Built Environment and Physical Activity: Data Collection Tools to Support Intervention. https://www.inspq.qc.ca/pdf/publications/1953_Built_Environment_Physical_Activity.pdf
11. Ibid.
12. Ibid.
13. Middlesex-London Health Unit. (2013). Active Community Toolkit for Reviewing Development Plans. London, Ontario. Kim Bergeron, PhD, Bergeron Consulting. https://www.healthunit.com/uploads/active-community-toolkit-for-reviewing-development-plans.pdf
14. American Planning Association. (2017). Metrics for Planning Healthy Communities. https://planning-org-uploaded-media.s3.amazonaws.com/document/Metrics-Planning-Healthy-Communities.pdf
15. Region of Peel. (2016). Healthy Development Assessment Tool. http://www.peelregion.ca/planning/officialplan/pdfs/HDA-User-Guide.pdf
16. Centre for Disease Prevention and Control. (2015). The Built Environment: An Assessment Tool and Manual. https://www.cdc.gov/nccdphp/dnpao/state-local-programs/built-environment-assessment/pdfs/BuiltEnvironment-v3.pdf
17. Maine Rural Health Research Center. (2009). Rural Active Living Assessment (RALA) Tool. https://activelivingresearch.org/rural-active-living-assessment-rala-tools
18. Brownson, R. C., C. M. Hoehner, K. Day, A. Forsyth and J. F. Sallis (2009). Measuring the built environment for physical activity: state of the science. American journal of preventive medicine, vol. 36, n° 4 Suppl, p. S99.
19. Ibid.
20. Institut national de santé publique du Québec. (2014). The Built Environment and Physical Activity: Data Collection Tools to Support Intervention. https://www.inspq.qc.ca/pdf/publications/1953_Built_Environment_Physical_Activity.pdf
21. NHSA, Pedestrian and Bicycle Information Centre, & US Dept. of Transportation. (n.d.). Walkability Checklist. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/walkingchecklist.pdf
22. NHSA, Pedestrian and Bicycle Information Centre, & US Dept. of Transportation. (n.d.). Bikability Checklist https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/bikabilitychecklist1.pdf
23. Government of Scotland & National Health Services. (2018). Place Standard Assessment Tool. https://www.placestandard.scot/
24. Eastern Highlands Health District, Plan4Health, & APACT. (n.d.). Community Health Quick Audit. https://static1.squarespace.com/static/568e94130ab3772ca8f3948a/t/570549e159827e7cad77e410/1459964385811/Community_Health_Quick_Audit.pdf
25. Heart Foundation. (2018). Healthy Active by Design. http://healthyactivebydesign.com.au/resources/healthy-active-by-design-master-checklists
26. Transport for London. (2018). Guide to the Healthy Streets Indicators. https://healthystreetscom.files.wordpress.com/2017/11/guide-to-the-healthy-streets-indicators.pdf
27. Simcoe Muskoka District Health Unit. (2014). Healthy Community Design: Policy Statements for Official Plans. http://www.simcoemuskokahealth.org/docs/default-source/jfy-communities/healthy_community_design
28. Conference Board of Canada & DIALOG. (2018). Community Well-being: A Framework for the Design Professions. http://www.dialogdesign.ca/community-well-being/
29. Caldwell, Wayne J.; Kraehling, Paul; Kaptur, Suzanna; and Huff, Jennifer 2015. Healthy Rural Communities Tool Kit – A Guide for Rural Municipalities. University of Guelph, Guelph, Ontario. https://www.publichealthontario.ca/en/ServicesAndTools/Documents/LDCP/HealthyRuralCommunitiesToolKit%20compressed.pdf
30. Centres for Disease Control and Prevention (2017). Healthy places [website]. https://www.cdc.gov/healthyplaces/
31. Building a Better B.C. for People with Disabilities; Province of BC. https://www2.gov.bc.ca/gov/content/governments/about-the-bc-government/accessibility

Resources to further support healthy built environment policy

Healthy Community Design: Policy Statements for Official Plans[27]

Community Well-being: A Framework for the Design Professions[28]

Rural Healthy Communities Toolkit[29]

Centers for Disease Control and Prevention: Healthy Places Resources[30]

Accessibility 2024[31]

Wells, B.C.
Source: Province of BC

More Information

Want to learn more about improving health and well-being in your community?

Health authorities can support local governments by providing advice and expertise, resources for local government staff and elected officials to develop healthy public policy, community health profiles, and opportunities to work together on joint healthy living actions. You may already have relationships with your health authority. If not, up-to-date contact information for your local health authority lead is available at planh.ca.

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