

# INTRODUCTION TO LAND USE PLANNING FOR HEALTH PROFESSIONALS

*Workshop Reader*



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**Cover photo: Sallis et al 2004**

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# FOREWORD

The Healthy Built Environment (HBE) Alliance was formed to coordinate collaborative efforts for improving population health through policies and practices related to the built environment. Over the past two years, PHSA and the Alliance have developed a **Healthy Built Environment Resource Kit** that member organizations can use to promote HBE issues within their own sectors. The Kit includes:

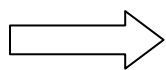
- **“Foundations for a Healthier Built Environment”**
- **“Introduction to Land Use Planning For Health Professionals” Training Module**
  - Sample Workshop Agendas & Sample Workshop Facilitator’s Guide
  - Power Point Presentations to Support Workshop Content
  - **Workshop Reader**
  - Sample Participant Feedback Form
- **“From Strategy to Action: Case Studies on Physical Activity and the Built Environment”**
- **“Creating a Healthier Built Environment in British Columbia”**
- **“Indicators for a Healthy Built Environment in BC”**

For maximum effectiveness, it is recommended that this **Workshop Reader** be used in conjunction with the resources listed above ([www.phsa.ca/PopulationHealth](http://www.phsa.ca/PopulationHealth)) as part of a knowledge translation process tailored to the needs of the intended audience.

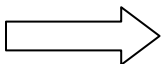
# INTRODUCTION

Land use planning is a complex field made up of legislation, plans, policies, processes and tools. As a health professional interested in promoting healthy built environments, it is important for you to become familiar with planning and decision-making processes, and learn how to take advantage of opportunities to influence design and development.

To be effective, you will need to:



Understand the basic vocabulary of planning – concepts, plans, tools, and who is responsible for key decisions.



Understand the community context and on-the-ground opportunities for change and upcoming planning processes.

This workshop reader refers to policy and programs, but also focuses on other planning elements that are important for health professionals to understand. The information provided in this document is a summary only, and has largely been taken from existing planning resources, portions of the *Local Government Act* and the *Community Charter*, and government websites. For more detailed information on planning requirements in BC, provincial, regional and local government sources should be consulted. West Coast Environmental Law’s web-published *The Smart Growth Guide to Law and Advocacy (2001)* has been an invaluable resource. Readers are encouraged to view their material online at <http://www.wcel.org/wcelpub/2001/13300.pdf>.

# THE LEGISLATIVE CONTEXT

## Provincial Legislation

### ***Local Government Act***

The Local Government Act (LGA) is provincial legislation that governs regional districts and certain municipal provisions including statutory requirements for land use planning, elections, and heritage conservation. It sets out provisions for the creation of Advisory Planning Commissions; required consultation and content for Official Community Plans (OCPs); requirements for Public Hearings on bylaws; zoning limitations; and so forth. It allows local governments to develop bylaws for the following, within their local boundaries:

- Official Community Plans
- Public Hearings
- Development Approval Procedures
- Advisory Planning Commission
- Board of Variance
- Zoning and Other Development Regulations
- Parking
- Drainage
- Signs
- Screening and landscaping
- Floodplains
- Farming
- Development Costs Recovery
- Subdivision Standards

The LGA also requires any municipality that has adopted an OCP and zoning bylaws to then adopt bylaws for Development Approval Procedures and for the establishment of a Board of Variance.

The LGA determines what can be addressed through zoning bylaws, allowing municipalities and regional districts to divide in part or in whole their land area into separate zones. The LGA allows for zones to address use of land and buildings within a zone; density; and siting, size and dimensions of buildings and uses.

Infrastructure control is also governed by the LGA, where local governments are required to set bylaws for service provision including the distribution and use of power and water, as well as sewage and drainage collection and disposal. Stormwater run-off control requirements are also part of local government responsibility, according to the LGA and as controlled by bylaws adopted from time to time.

### ***Regional growth legislation***

Under the Local Government Act, regional districts may develop regional growth strategies (RGS). The purpose of these strategies is to “promote human settlement that is socially, economically and environmentally healthy and that makes efficient use of public facilities and services, land and other

resources.” Once a regional government begins the process of developing a regional growth strategy, they are bound by this legislation to address the following:

- Housing
- Transportation
- Regional district services
- Parks and natural areas
- Economic development

A RGS must also include: social, economic and environmental objectives; population and employment projections; and a list of actions required to meet the projected needs for the population.

### ***Community Charter***

In 2003, the province introduced legislation referred to as the Community Charter. The Community Charter provides municipalities with most of their powers to regulate buildings and other structures, as well as other powers related to planning, such as tree protection authority and concurrent authority for protection of the natural environment. Municipalities cannot use the fundamental powers provided by the Community Charter to do anything specifically authorized under the LGA” (UBCM, 2006). This comprehensive legislation required amendments to the LGA, is meant to be used in conjunction with the LGA, and provides fundamental powers for all municipalities except Vancouver. It changed local government legislation in three areas: municipal-provincial relations, broad powers, and accountability.

### ***Local Services Act***

The Local Services Act is also provincial legislation, and is especially important for rural areas in BC that are not incorporated as a municipality. It allows the province to apply powers typically applied by a municipality, and especially in the following areas: regulation of the use and subdivision of land, and the construction of buildings and other structures; and the preparation of OCPs (UBCM Advisory Services, Series No. 26, Fact Sheet, Planning and Land Use Regulation, 2006).

## **Municipal Legislation**

### ***Local Government***

Municipal legislation is enacted through bylaws passed by elected Councils. A zoning bylaw, for example, describes in detail the various property uses which are permitted in specific areas throughout the city. Other types of land use bylaws which are common to many municipalities are parking bylaws and property standards bylaws. It is most important to remember that the province – through the LGA and the Community Charter – provides the legislation that enables local governments to enact land use regulations.

# ROLES OF GOVERNMENT

There are four levels of government, each playing a unique role and with distinct jurisdictions when it comes to land use decision-making. These include the federal, provincial, municipal and First Nations governments. First Nations hold a unique position with respect to land use planning. As original inhabitants of BC, they have aboriginal rights of land ownership and use. A brief description of land use planning requirements on First Nations land is included below.

Within each level of government, various department leaders and elected officials are tasked with key decision-making responsibilities. A typical municipal government structure is provided to help identify the relationships between various department heads. The roles played by different local government leaders are further described under the section *Who's Who*.

## ***Role of Local Governments***

Local governments are often called 'creatures of the province,' due to their responsibilities being delegated to them by their parent body, the provincial government. With that condition in mind, a local government is responsible under the Community Charter for providing:

- Good government to its community.
- Services, laws and other matters for community benefit.
- Stewardship of the public assets of its community.
- Fostering the economic, social and environmental well-being of its community (Community Charter 2003).

Municipal land use authority does not apply to airports, harbours, railways, Indian reserves or tree farm licenses on Crown land, even if these are located within municipal boundaries (WECL 2002). While the Provincial Crown land is immune from local government authority, tenants may, however, be required to abide by local government regulations.

## ***Role of Regional Governments***

Regional governments play three main roles, including:

- Acting as a municipality in areas where there is an absence of local government. This is primarily in rural areas.
- Providing a political and administrative framework for inter-municipal or sub-regional service and partnerships through the creation of "benefiting areas" (Ministry of Community Services, 2006, p. 5).
- Providing regional governance and service delivery for a region as a whole. This includes delivering typical region-wide services such as water supply, economic development, sewage disposal, and solid waste management.



At times, there is confusion between the role of the regional and the municipal government. It can best be described as the regional government acting as a wholesaler, and the municipality as a retailer. For example, “the regional district manages the central reservoirs and treatment facilities and delivers the water to the gates of the municipality, which in turn, acts as the retailer distributing water to individual customers” (Ministry of Community Services, 2006, pg.5).



Regional Districts in BC Source:  
[http://www.cserv.gov.bc.ca/lgd/gov\\_structure/library/Primer\\_on\\_Regional\\_Districts\\_in\\_BC.pdf](http://www.cserv.gov.bc.ca/lgd/gov_structure/library/Primer_on_Regional_Districts_in_BC.pdf)

### **Role of Provincial Government**

The provincial Ministry of Community Services administers the Local Government Act and oversees some municipal land use decisions. The province will approve most rural land use, zoning and subdivision servicing bylaws made by regional districts (WCEL 2001).

Other provincial ministries or crown corporations may also become involved in land use planning. These include:

- Ministry of Agriculture and Lands - with respect to farm bylaws and regulation of agriculture.
- Agricultural Land Commission (ALC) – an independent Crown agency that is tasked with preserving agricultural land and encouraging and enabling farm businesses throughout the province.



- Ministry of Energy, Mines and Petroleum Resources - with respect to public utilities, pipelines, and gravel pits.
- Ministry of Environment - addressing floodplains and floodplain specifications, protection of habitat for fish and wildlife, environmental assessments in limited circumstances.
- Ministry of Transportation - regarding provincial highways, ferries and transit, as well as approval of permits for certain commercial and industrial buildings.
- BC Hydro - deals with land use affecting power lines, stations, dams and other installations for power. BC Hydro is not generally subject to local government land use bylaws. (WCEL, 2001)

For more information on the role of the provincial government in land use decision-making, see Ministry of Community Services, Local Government Department at <http://www.cserv.gov.bc.ca/lgd/>.

### ***Role of Federal Government***

The federal government does not play a direct role in local land use decision-making. However, the following departments do become involved and can have significant impact on planning processes when decisions may affect lands or issues under federal control.

Department of Fisheries and Oceans (DFO) - any development or activity affecting fish habitat may involve DFO, either in the development referral process where DFO's approval to proceed is sought, or when a development has contravened laws protecting fish habitat.

Transport Canada - land use around airports, harbours and ports often require Transport Canada involvement.

Environment Canada - environmental assessments of certain projects that affect federal interests in development are conducted through this department (WCEL 2001).

### ***Role of First Nations***

Municipal boundaries may include First Nations reserves or abut reserve land. At the very least, most reserves are located within regional districts. However, municipal or regional district bylaws regarding land use do not apply to reserve land. This is due to the aboriginal rights of land ownership and use held by First Nations. In the development of an OCP, a local government is required to consult with First Nations, as adjacent land use may have an impact on reserve land. However, the OCP does not affect land use decisions on the reserve (WCEL 2001).

Under the Indian Act, reserve land is federally owned and managed by First Nations band councils. The exception is with First Nations who are working with the Framework Agreement on First Nations Land Management. The *First Nations Land Management Act* requires First Nations working with the Agreement "to adopt a Land Code, and gives the First Nation legislative authority to make laws regulating land use and development, including zoning and subdivision control, environmental

assessment and protection, the provision of local services to reserve land, and charges for those services.” (WCEL 2002 pg. 22)

For additional up-to-date information on First Nations and land use planning, see <http://laws.justice.gc.ca/en/F-11.8/index.html>.

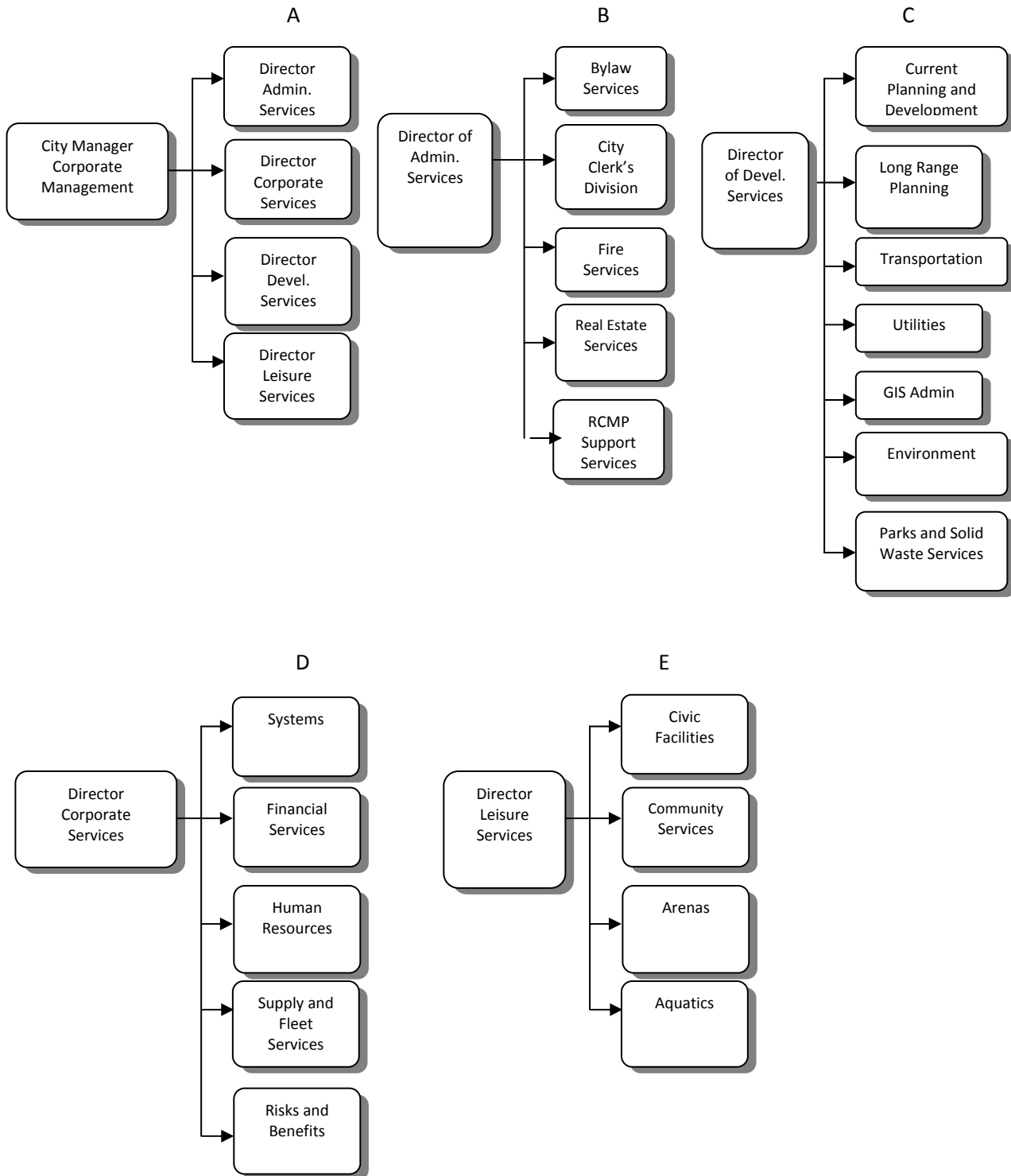
### ***Local Government Structure***

Municipalities elect a mayor and council every three years. The Council/staff relationship is based on the executive model where the Chief Executive Officer (sometimes referred to as the City Manager) is accountable to Council, and staff are accountable to the CEO. While local government staff are accountable to mayor and council, the elected officials are accountable to the community. This is important to keep in mind, as health recommendations that go to staff are sometimes not adopted at the political level, as other competing public interests may be given a higher priority.

Many municipalities use a standing committee structure to enable Councils to effectively manage the many activities under their jurisdiction. Committees are assigned an area of responsibility (such as planning, transportation, public works) and appropriate issues are funnelled to the committee before being considered by the full Council. Committees prepare reports based on input from both departmental staff and members of the public and present council with their recommendations.

Council is supported by a municipal staff structure. This structure differs from community to community, but typically includes departments such as planning and/or development services, parks and recreation, engineering, community economic development, and finance.

The charts on the following page provide an example of a typical local government structure. *See Appendix C for more examples.*



City of Prince George Organizational charts, 2008

A) City Services B) Administrative Services C) Development Services D) Corporate Services E) Leisure Services

# INVOLVEMENT OF HEALTH PROFESSIONALS IN PLANNING

There are many different ways that Health Professionals can become involved in land use planning processes. There are both formal mechanisms and informal approaches that health professional can use. To date, health professionals most often intersect with planning through:

- a) The review of:
  - Site development applications – usually multi-family and often higher density;
  - Solid and liquid waste management plans;
  - Watershed management plans;
  - Air quality management plans.
  
- b) Committees or tasks forces.

Suggestions for formal and informal approaches that health professionals can use to effectively contribute to land use planning are included in the following pages.

## **Formal Involvement**

Becoming involved in an established planning process, such as acting as an external reviewer of development proposals or rezoning applications at the request of local government staff, can be considered taking advantage of **formal** mechanisms for involvement. Other formal mechanisms for involvement can include attending community consultations; participating as a stakeholder in a design charrette for a new area plan or development; or securing a seat on an advisory committee to council, including planning commissions.

Taking advantage of opportunities for formal involvement is important, as these are sanctioned means for staff and elected officials to secure feedback that they can act upon, with regards to land use and development decisions.

Many of the formal mechanisms underpin successful approaches to creating healthy, sustainable communities at the local government level. Evidence on best practices shows that the following are important to creating healthy communities:

- Intersectoral collaboration and open communication.
- The value of process as well as outcome.
- Accessible and transparent decision-making structures.

### **Advisory Committees to Council**

The Interior Health Authority's (IHA) Director of Health Protection sits on the Sustainable Kamloops Committee, which helps guide the City of Kamloops Integrated Sustainability Plan. In Vancouver, the Regional Director of Health Protection participated in the city's Cool Vancouver Task Force, a committee made up of government staff, elected officials and community groups who are addressing climate change. Both these committees affect land use decisions that have health impacts. Health representatives bring valuable health information to the table, and can alter the course

- The need to build on existing structures of community representation.
- Skills development and education for all stakeholders as required (Ministry of Health, 2007 p.13).

By participating in formal decision-making processes, health professionals not only have a direct link to land use planning decisions – they are also contributing to the development of robust consultation processes essential to overall community health.

### ***Informal Involvement***

Recent research into the influence of health professionals on planning and policymaking suggests that there are some engagement strategies which are more effective than others, and that informal mechanisms for involvement in land use decision-making are as important as formal mechanisms (Deby and Frank, 2007). **Informal** mechanisms for involvement are those opportunities outside of established planning processes. They can include:

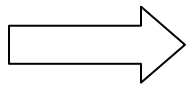
- Educational workshops, panels, lectures or other sessions targeting land use stakeholders and designed to share information on health and the built environment.
- Informal meetings with senior planning staff or developers to bring attention to health and built environment issues.
- Acting as a resource for community organizations and providing them with health data that supports their requests for more or better smart growth planning.

The following identifies important strategies or considerations when employing either formal or informal mechanisms for involvement:

- Prior **relationship-building** with planners, elected officials and policymakers.
- Prior **education** of stakeholders, especially planners, elected officials and policymakers about the relationship between public health and built environment.
- **Early involvement** of stakeholders, including developers, in public health considerations.
- Ability to provide clear **evidence** to back up proposed changes in the interest of public health.
- **Connecting health with other goals**, for example the creation of tourist-friendly streets and transit systems, or environmental protection.
- **Political will** or at least support from elected officials.
- **Persistence** in the face of resistance.
- Facilitating **dialogue** among other stakeholders.

(Deby and Frank, 2007)

While each of these strategies is important, prior relationship-building is key as it can allow other strategies to unfold. Relationship-building can allow for incremental education of stakeholders so that when decision-making time is at hand, people are already equipped with good information. When good relationships are in place, it is easier to request and facilitate the early involvement of stakeholders, particularly developers.

**GET INVOLVED**

Take advantage of formal and informal involvement mechanisms by:

- Influencing the terms of reference for one or more of the Advisory Committees. This may require working with senior planning staff, potentially a presentation to council, and will eventually require contact with the City Clerk's office. Aim to secure a specified assigned seat on, for example, an Economic and Development Advisory Committee, or the Planning Commission.
- Requesting to be on a circulation list of inside and outside agencies that review development plans.
- Receiving meeting minutes from any number of specific Advisory Committees. These are public and are usually on the web site. This keeps Health Professionals in the loop regarding upcoming developments and staff considerations around these projects.
- Setting up strategic meetings with the following influential players: your leading local developer; Director of Planning or Engineering. Consider your key message and how to connect health with other locally important goals, such as Increasing Tourism or Reducing Climate Change Contributions.
- Setting up monthly breakfast meetings between senior planners and health professionals to network and share information. Consider focusing on the sub-regional level, and potentially piggy-backing on existing meetings, such as existing Technical Advisory Committee meetings.
- Partnering with PIBC or UDI to hold a forum to share information on health and the built environment with local members, professionals and citizens. Present as strong a business case as possible for solutions.
- Attend and present at conferences for planners, such as the yearly PIBC conference.

**City Clerk**

The office of the City Clerk is primarily responsible for providing administrative support to council. The Clerk's Office records minutes of the meetings of Council and maintains them for public access, and produces agendas for those meetings. The City Clerk also coordinates council committees.

The City Clerk is a good place to start if you are:

- Requesting a presentation to council.
- Seeking minutes that document council approval or support for various land use plans.
- Interested in finding out more about various advisory committees in place and their seat

*See Appendix B for Agency Descriptors for PIBC and UDI.*

# WHO'S WHO IN LOCAL GOVERNMENT

## Elected Officials

### Mayor

The mayor (or regional district board chair, as the case may be) is the head and chief executive officer of a municipality. The mayor is an elected official tasked with chairing, reflecting the will and carrying out the responsibilities of, the council. Main responsibilities include: providing leadership to council; “recommending bylaws, resolutions and other measures that, in the mayor's opinion, may assist the peace, order and good government of the municipality”; providing direction on behalf of council to municipal officers implementing municipal policies and programs; and establishing standing committees (LGA).

### Councillors

Councillors are elected officials that, along with the mayor, are the governing body of a municipality. They are responsible for considering the well-being and interests of the municipality and its community; and contributing to the development and evaluation of municipal policies and programs affecting services and other activities (LGA).

### Regional District Boards

Regional districts are governed by a regional board, composed of elected directors representing different unincorporated electoral areas and appointed directors who are members of council of the member municipalities (WCEL 2001).

## Senior Local Government Staff

### City Manager/Chief Administrative Officer (CAO)

The City Manager (also sometimes called the Chief Administrative Officer) holds the administrative responsibility for carrying out policy set by council and managing local government services. The city manager is directly responsible to council. Part of her/his task is to ensure that council is provided with advice and options regarding emerging issues and policies.

### Director of Planning

The Director of Planning is a senior leader responsible for the planning, management and administration of short and long-term (land use) planning, building and code enforcement in the community. In larger municipalities, the Director of Planning will lead a team of planners, landscape architects, bylaw officers, etc. to fulfill the department's mandate, and is typically directly accountable to a municipality's CAO or City Manager. In communities where there is both a department of planning and a department of development services, the Director of Planning may not be managing those tasked with administering development applications, but would typically be overseeing the development of the policy context in which development is taking place.



### **Director of Engineering**

The Director of Engineering is the department head responsible for leading professional engineers, project managers, technicians and support staff in managing engineering works in a municipality. This position is typically be responsible for big picture, long-term planning of engineering and facilities infrastructures, as well as facility operations and responsible for delivering capital programs involving engineering works. The Director of Engineering reports to the CAO or City Manager, and is often a peer to the Director of Planning.

### **Director of Parks and Recreation**

The Director of Parks and Recreation will typically oversee and provide leadership in the planning, development, coordination, implementation, and evaluation of citywide parks, community service programs, recreation facilities and programs and day-to-day operations. In many cases, parks, recreation and culture are managed as one department, with the Director providing leadership to all three areas. In some municipalities, recreation is separated out under facilities with a separate director. Art and heritage can likewise be distinct areas of work and responsibility with their own Director providing leadership. The Director of Parks and Recreation typically reports directly to the City Manager.

### **Director of Development Services**

The Director of Development Services is sometimes interchangeable with the position of Director of Planning, and in that case, is responsible for the City's current planning and development (including the processing of rezoning, development permits, and Agricultural Land Reserve applications). They also manage subdivision approvals, environmental planning, and in the absence of a long range planner, may oversee long-term land use planning such as a regular updating of the Official Community Plan. This position may also deal with property records maintenance, building permits and inspections, bylaw enforcement, business licensing and dog licensing. A Director of Development Services usually reports directly to the City Manager or CAO.

### **Long Range Planner**

The Long Range Planner is responsible for formulating and updating land use policies to guide development within a municipality. Specific responsibilities may include the annual updating and on-going monitoring of the municipality's Official Community Plan; preparing Neighbourhood or Local Area Plans; preparing new planning policies for consideration by Council; and monitoring market trends and community expectations in relation to the on-going development of the municipality. A Long Range Planner usually reports directly to the Director of Planning or Development Services.

### **Approving Officer**

Council is required to appoint an officer to approve subdivision plans. The Approving Officer is often the city planner in incorporated jurisdictions, but can be the municipal engineer or another municipal employee in other jurisdictions. While Council sets the regulations for subdivisions, they cannot direct the Approving Officer to approve or not approve a plan – the Approving Officer is responsible to the Province to carry out the duties as set out in provincial legislation. In unincorporated areas, an official of the Ministry of Transportation is appointed by the Provincial Cabinet as the approving officer. Regional districts or the Islands Trust may take this function over if they wish (UBCM Fact Sheet, Statutory Officials, UBCM Advisory Service, Series 19, 2006).

## **Additional Staff Influencing the Built Environment**

### **Transportation Planner**

The Transportation Planner manages long- and short-range transportation planning activities and prepares transportation studies such as system analyses and travel demand forecasting. Implementing funding strategies for transportation projects and programs is an important part of this position and may include capital development, grant application and administration, and capital facility plans. Program development may include Neighbourhood Traffic Programs, multi-modal transportation plans and programs, and Commute Trip reduction programs. Policy direction for transportation is usually established by City Council. Transportation planning usually falls under the Department of Engineering, but involves liaison with other City departments.

### **Environmental Services Manager**

The Environmental Services Manager is typically responsible for providing recycling, yard waste and garbage disposal options for residents, including managing the Residential Curbside Recycling and Garbage Collection Program. They are also dedicated to protecting air and water quality through environmental programs and educational initiatives. The Environmental Services Manager often reports to the Director of Engineering.

### **Bylaw Officers**

Under the Community Charter, bylaw officers can be licensing inspectors, building inspectors, animal control officers or other persons acting on behalf of the municipality, regional district or local trust committee, and enforcing bylaws (Community Charter, 2003).

Building inspectors are responsible for performing the residential, commercial, and industrial building and plumbing inspections for development applications received by a municipality. Bylaw officers will also ensure compliance with BC Building Code, City Bylaws, and Provincial & Federal regulations for all residential, commercial, and industrial development within a City.

In addition to building inspections, a bylaw officer's tasks may include maintaining compliance to numerous bylaws such as Land Use, Environmental Services, Noise Abatement, Unightly Premises, Business Licenses, Water Use, Regional Parks, Animal Control and Smoking Regulations. Bylaw enforcement officers' responsibilities vary considerably from one municipality to another.

## **Committees, Boards and Development Applicant**

### **Advisory Committees**

These are committees struck by council to provide advice to elected officials on specific topics. Advisory Committees usually include citizens-at-large and a staff representative who acts as a resource but is not a member of the committee. Participation is through appointment and the Terms of Reference (criteria for committee seats) are set by council. Often, committees are struck to address specific topics – the environment, local development, seniors' issues, bike user group, etc. While committees have certain themes, tasks can overlap. For example, development issues are most likely to be addressed by the development committee, but the environmental advisory committee will often also provide input from an environmental perspective. In some cities or towns, different Advisory Committees are set for specific neighbourhoods.

Health Professionals can request from council a seat on an existing committee, or promote the establishment of a separate health advisory committee.

### **Board of Variance**

If Council or the board has adopted a zoning bylaw, they must establish a Board of Variance. This is an administrative tribunal empowered to hear and adjudicate questions that may arise through a municipality's or district's administration of land use and subdivision servicing bylaws. The Board typically hears appeals from people alleging they are caused "undue hardship" by:

- Enforcement of the Land Use Bylaw regulation concerning the siting, size or dimension of a building;
- Prohibition of structural alternations or additions to a building or structure;
- Enforcement of a Subdivision Servicing Bylaw requirement related to water, sewage, and drainage services in areas zoned for agricultural or industrial use.

Members are appointed to the board by local government. The Board does not have the authority to rule on policy issues of Council, so cannot consider variances to density or in land use. It cannot make decisions that change the intent and purpose of land use and subdivision bylaws. The board cannot award a variance or exemption that deals with a matter covered in a development permit, or development variance permit, a Tree Cutting Permit, or a designated flood plain (District of Metchosin, 2002).

### **Planning Commission**

A committee to council that advises on issues related to the long range planning of a city or town. Issues may range from development and governance, to transportation and the public realm. Members of a Planning Commission are appointed by council, and include citizen representatives. Members of council, regional district board representatives, local government staff, or an approving officer are not eligible to be a member of the committee, but may attend meetings as a local resource.

### **Development Applicant**

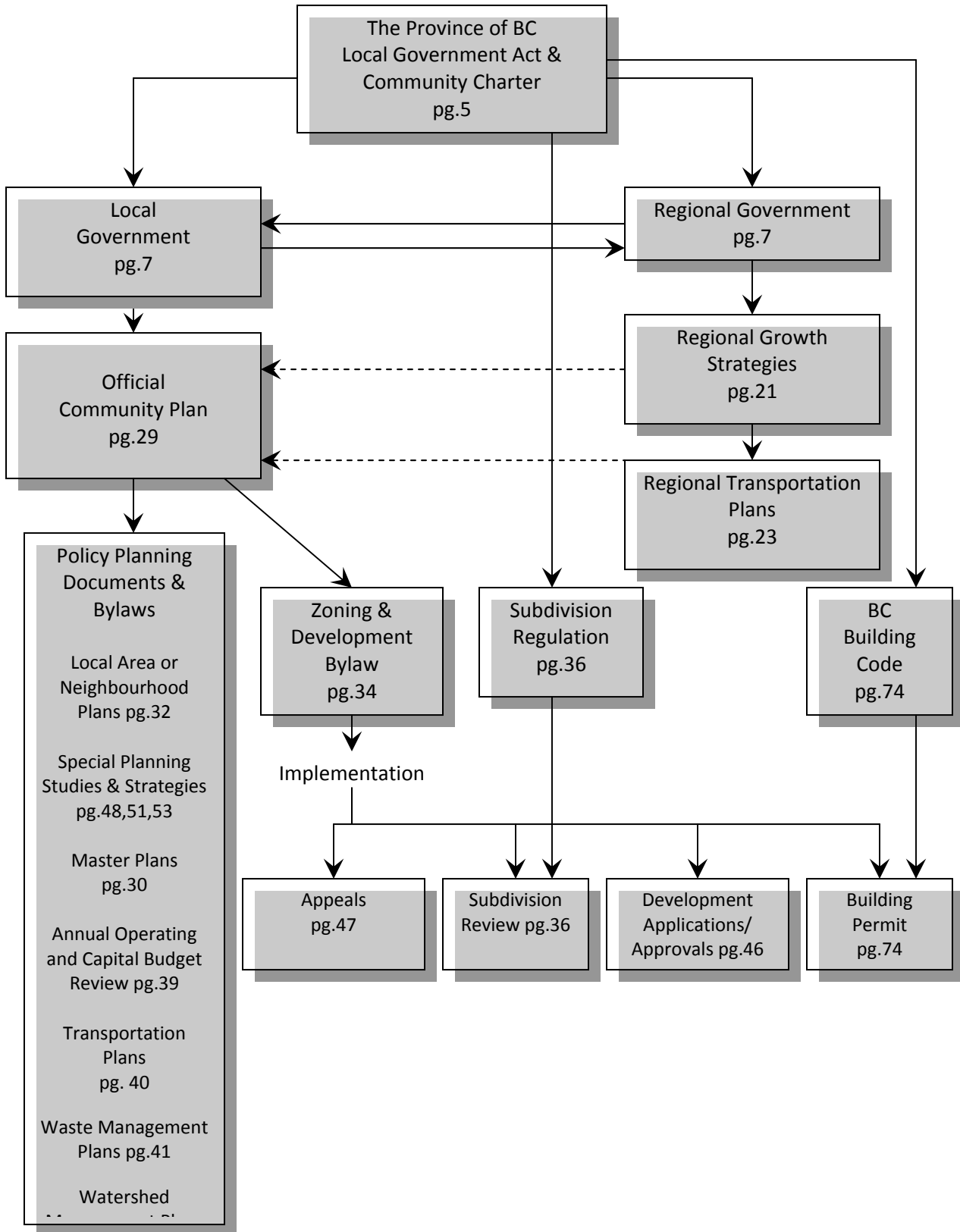
Person or corporation making a development application, from a local neighbour to a large scale development company. Applicants are guaranteed, legally, to be treated fairly and consistently, with their application judged in relation to existing policies, and "that decisions are based on planning principles and approved planning documents" (City of Calgary, 2002).

## HIERARCHY OF PLANS

There are a number of plans generated at the regional, municipal and site scale that include policy statements addressing land use decision-making, community design and bylaw development. Many plans typically require some form of consultation process, whether that is a requirement for external review or a public outreach component. Each plan impacts the built environment – and provides a strategic opportunity for health professionals to promote healthier community plans as part of policy and standard formation. *See the next page for an illustration of how different plans respond to or nest within each other, from regional to site scale.*

This section presents a number of land use plans and planning processes. Entry points where health professionals can offer advice and feedback are identified, along with some suggestions of what to look for in a particular plan. Often the best plans are those with integrated policies, standards and practices - one policy alone does not suffice. What to 'Look For' suggestions are starting points only, and will range from policy statements to design considerations. Many suggestions under 'Look For' will refer to tools and strategies that are further defined either in the *Glossary or Tools, Targets and Indicators* section.

While land use and development decision-making is similar throughout the province, processes and terms used to describe various plans can differ slightly from community to community. Even how various plans nest or interrelate with others can vary from jurisdiction to jurisdiction. The information that follows offers a starting vocabulary for those new to land use planning. For confirmation of terms and processes in use in your community, be sure to contact your local government authority.


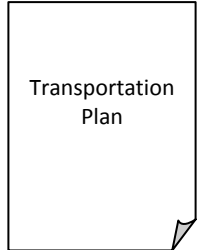


*Plans and Processes from Regional to Site Scale*

(Page numbers refer to pages within this document where these plans and processes are discussed in greater detail.)

## Regional Level

There are two regional level plans important to the creation of healthier built environments: Regional Growth Strategies and Regional Transportation Plans.

PLAN or PROCESS	Policy	INVOLVEMENT OPPORTUNITIES
 <p>Regional Growth Strategy</p>	E.g. Town Centre Nodes	Community Consultations Meetings and Dialogues
 <p>Transportation Plan</p>	E.g. TDM (Transportation Demand Management) Policies	Public Consultations Stakeholder Committees Transport 2040 outreach

### Regional Growth Strategies (RGS)

Regional Growth Strategies are initiated by Regional Districts, and are negotiated with the municipalities in the regional district. They are meant to work towards, among other goals, avoiding urban sprawl and ensuring that development takes place where adequate facilities exist or can be provided in a timely, economic and efficient manner; settlement patterns that minimize the use of automobiles and encourage walking, bicycling and the efficient use of public transit (Ministry of Community Services, 2005). When municipalities develop their OCP, they are required to include a reference to the Regional Growth Strategy (if one exists) and demonstrate how their OCP aligns with it.

Regional governments are required to deliver a consultation plan as part of the initiation of a regional growth strategy. At a minimum, the following must be consulted:

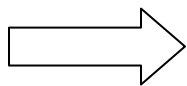
- The (regional government's) citizens;
- Affected local governments;
- First Nations;
- School District Boards and Improvement District Boards, and
- The Provincial and Federal governments and their agencies.

#### **Creating Regional Dialogue**

In the Lower Mainland, Metro Vancouver has created a series of 'Breakfast Meetings' and 'Dialogues' that host expert guest speakers, invite Q&A sessions, are free to the public, and touch on topics core to the Regional Growth Strategy. They provide an opportunity for discussion amongst stakeholders, and a mechanism to provide feedback to regional government staff.

Often, a separate series of public meetings, ‘dialogues’, or advisory committees organized according to stakeholder interests are provided as part of the consultation process. While advisory committees are set by the regional district, public meetings or other speaking events are typically open to the public and include opportunities for citizens to speak with local experts and sometimes regional district staff.

GET INVOLVED



**GET INVOLVED**

- Attend the public consultations or meetings. Ask staff what policies and practices will be included in the RGS to address health and the built environment, or provide staff with suggestions.
- If a series of lectures or dialogues are being presented as part of the RGS strategy, request the regional district to host a separate public presentation on health and the built environment. Consider being the guest speaker!
- Speak to lead planning staff about securing a seat on an appropriate advisory/stakeholders committee. This may include the intergovernmental advisory committee that a regional district is mandated to form when preparing a RGS. Provincial representatives who sit on this committee are determined by the Regional District in consultation with the province (LGA).
- Apply pressure to require plans are updated in a timely fashion.

LOOK FOR



**LOOK FOR**

- Mixed-use, high density town nodes that create walkable communities, especially in areas where health inequities and at-risk populations are high.
- The inclusion of regional greenways that support active transportation and recreation, along with habitat protection.
- Policies that support infill development. For example, the use of green zones that discourage development in sensitive areas, and encourage building in existing developed areas.
- Affordable housing strategies that site units within mixed use areas.
- Policies that support the Agricultural Land Reserve.



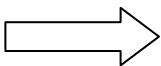
## Regional Transportation Plans

Transportation Plans are a long-term blueprint of a region's transportation system. These plans identify and analyze transportation needs of a region and create a framework for project priorities. In some areas, there will be long range (e.g. 30 year plus) plans, complemented by a series of sub-regional plans that have shorter timelines (e.g. 5 years, and often updated every 2 years). Transportation plans at the regional district level are primarily addressed through the regional growth strategies. Regional Districts are not, however, responsible for providing transportation infrastructure. To achieve on-the-ground change, transportation plans need to be translated into OCPs (WCEL 2001).

BC Transit is responsible for implementing regional transportation plans, in coordination with municipalities and regional districts, throughout the province except for the Lower Mainland. Regional plans currently exist for the Central Okanagan, Nanaimo and Abbotsford-Mission, for example. In the Lower Mainland, Translink – South Coast British Columbia Transportation Authority is responsible for regional transportation delivery from Pemberton to Hope. Translink's role is to facilitate, coordinate, set management standards for roads and cycling facilities and provide partial funding. The regional bus system, bicycle network, budget support for the road network as well as responsibility for the Westcoast Express commuter train from Mission to Vancouver, and the Skytrain all fall within Translink's domain. While municipal governments are responsible for maintaining and managing their road networks, it is Translink's funding contributions that give them significant input into decision-making.

Translink is required to consult with the public, organizations that will be affected by transportation plans, local governments and the Province before finalizing plans that impose parking taxes, user fees, tolls, etc. Watch for announcements of public consultations with respect to these types of planning decisions. In terms of major transportation planning decisions, there is a Translink Public Advisory Committee made up of 25 or more key stakeholders that provides input to transportation plans.

Translink is in the process of updating sub-regional transportation plans and is also in the midst of establishing a long range transportation plan called *Now is the Time Transport 2040*. Consultations with stakeholders and the public took place in the fall of 2007 and early winter 2008. Open houses and interactive online panels will continue to solicit public feedback.



### GET INVOLVED

- Attend Open Houses to submit verbal and written feedback on transportation plans.
- BC Transit, in partnership with regional districts and local municipalities, will sometimes hold stakeholder meetings to secure input into a regional transportation planning process. Participate in these stakeholder meetings.

- Contact your regional or local Director of Planning to confirm when and if such meetings are taking place. Alternatively, contact the BC Transit Planning Manager to confirm the status of a regional transportation plan in your area, and opportunities for involvement. For the Capital Regional District, contact Mike Davis; for all other communities outside the Lower Mainland, contact Megan Hill.
- Translink is willing to hear public delegations wanting to speak on policy, planning, revenue or capital projects. Consider appearing before Translink as a public health delegation to speak on highway expansion projects or transit services that could affect the health of communities in your jurisdiction. Confirm the length of time you need to register in advance (in some cases, nine working days) of the next Committee of the Whole meeting.



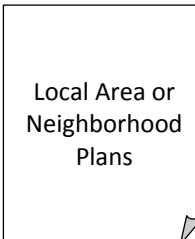
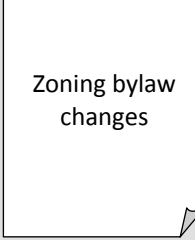
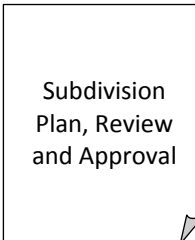


### LOOK FOR

- Regional bicycle plans that provide a cycling network between municipalities for both commuters and recreational cyclists.
- Regional bus system that allows express access between key municipal centres.
- Transportation Demand Management strategies including HOV (High Occupancy Vehicle) lanes that support carpooling; facilities that support bicycling and walking to work (e.g. secure bike parking).
- Transit priority measures – infrastructure that supports transit use over automobile use, including the provision of timed lights.
- In areas serviced primarily by a regional transit system, look for a significant percentage of population within a 5 minute walking distance or less of a peak hour bus service.

## Municipal Level

Many municipal level plans significantly impact the shape and form of built environments across whole cities or towns, even while they may play out neighbourhood by neighbourhood. It is critical that Health Professionals become involved in land use planning at this scale, as it is in the built environment aggregate (localized yet system-wide) that significant gains can be made in population health.

PLAN or PROCESS	Sample Policy Considerations	INVOLVEMENT OPPORTUNITIES
 <p>Official Community Plan</p>	E.g. Smart growth policies	Planning Commission Development Advisory Committee Community Consultations Charrettes Presentations to Council
 <p>Master Parks/ Recreation/ Cultural Plans</p>	E.g. Adequacy of park space for community use and environmental protection	Environment Advisory Committee Community Consultations Collaboration with local advocacy groups
 <p>Local Area or Neighborhood Plans</p>	E.g. Affordable housing policies	Meetings with environmental and development approval planners; Community consultations; Charrettes Stakeholder & interagency meetings
 <p>Zoning bylaw changes</p>	E.g. Infill development policies	Public Hearings/consultations
 <p>Subdivision Plan, Review and Approval</p>	E.g. Low Impact Development (LID) policies	External Reviews

<p>Annual operating and capital budget review</p>		<p>Public meetings/consultations Yearly budget reviews Infrastructure renewal and funding decisions</p>
<p>Transportation Plans</p>	<p>E.g. Transportation Demand Management (TDM) policies</p>	<p>Transportation Advisory Committee Open Houses</p>
<p>Waste Management Plans</p>	<p>Eg. Policies protecting ecological corridors, as part of Integrated Stormwater Management Planning (ISMP)</p>	<p><b>Health Professionals currently review plans</b></p>
<p>Watershed Management Plans</p>	<p>Eg. Policies supporting reductions in impervious surfaces.</p>	<p><b>Health Professionals currently review plans</b></p>
<p>Airshed Management Plans</p>	<p>Eg. Transportation Demand Management (TDM) policies</p>	<p><b>Health Professionals currently review plans</b></p>

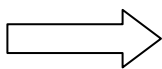
### Official Community Plan (OCP)

An Official Community Plan is a bylaw adopted by council that sets out the broad objectives and local government policies regarding the form and character of land use and servicing requirements in the area covered by the plan – typically the entire municipality (LGA). An OCP sets the vision for how a community will grow. OCPs are a statement of policy and do not directly regulate the use of private property. According to the LGA, they must include statements and map designations that identify:

- Approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least 5 years.
- Approximate location, amount and type of present and proposed commercial, industrial, institutional, agricultural, recreational and public utility land uses.
- Restrictions on the use of land that is subject to hazardous conditions or that is environmentally sensitive to development.
- Approximate location and phasing of any major road, sewer and water systems.
- Approximate location and type of present and proposed public facilities, including schools, parks and waste treatment and disposal sites.

OCPs must include housing policies, typically addressing social development issues, and usually include policies relating to the preservation, protection, restoration and enhancement of the natural environment. OCPs do not commit local governments to proceed with projects identified in the plan, **however, zoning bylaws and development permits must conform to the OCP**. Zoning bylaws put the OCP into effect. Regional districts also use OCPs, and may have multiple OCPs for large geographical areas.

During the process of developing or reviewing an OCP, municipalities must follow the procedures set out in the LGA, including requirements for public participation before the plan is passed by council. It is recommended that an OCP be reviewed every 5 years, though many municipalities in BC are unable to update their OCPs within this timeframe. OCPs may be amended at any time because of changing community circumstances, or when a property owner, resident association or other entity can apply for consideration of an OCP change.



### GET INVOLVED

- Secure a seat on the advisory committee or planning commission in advance of an OCP review.
- Attend public consultation meetings and provide both written and verbal feedback. Verbal feedback at open mike Question and Answer sessions also provide an opportunity to inform the general public and encourages individuals to pick up on health considerations in the planning process.
- Speak to the director of planning, and request participation in a Charrette if one is being undertaken in your community.

- Present to council, providing feedback and recommendations for the OCP. You can request a special presentation to council, or time your presentation during others held to specifically deal with OCP issues.

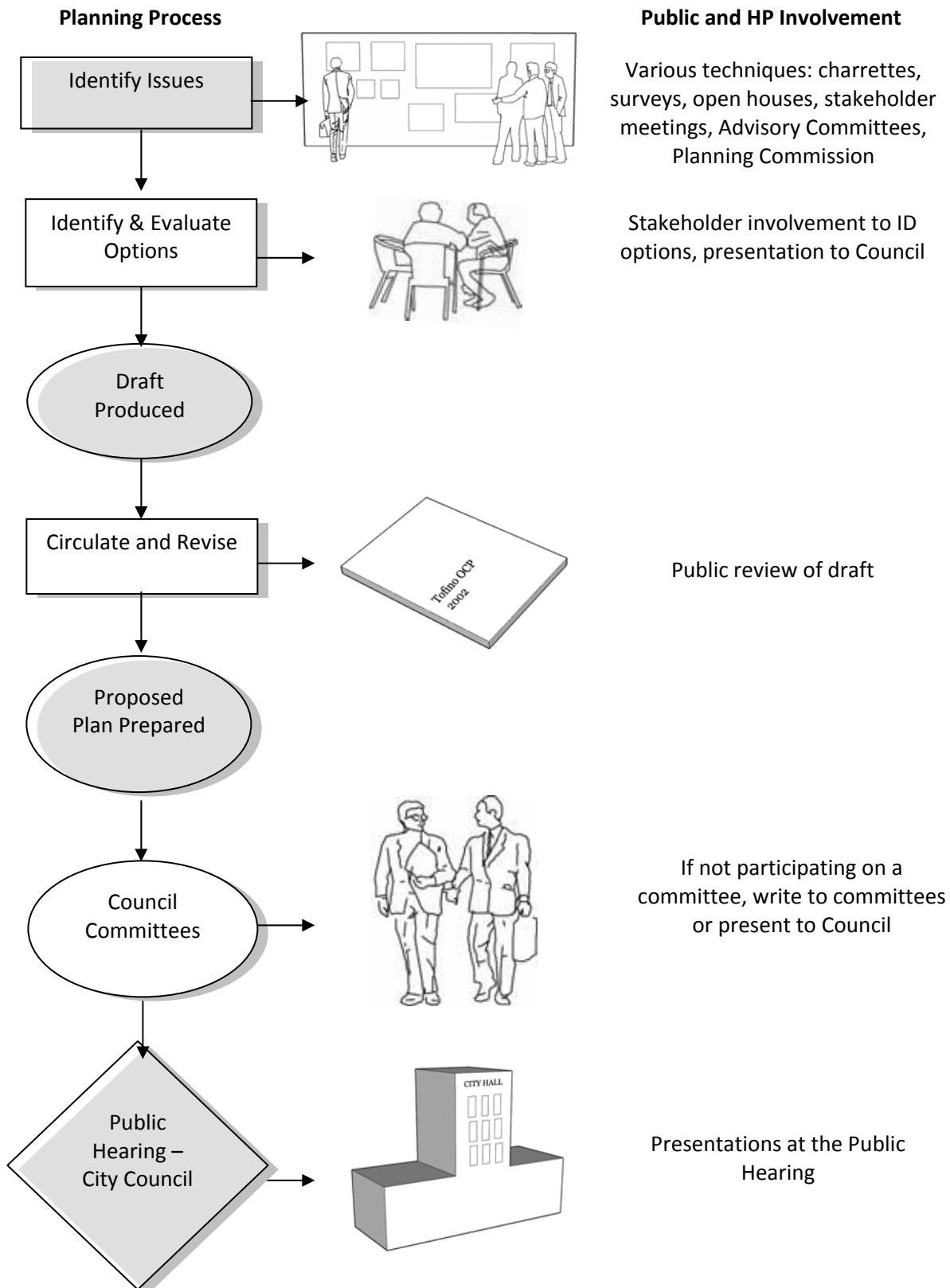
Advocate for policies that are as specific as possible. There is greater likelihood of action being taken on plans with clear prohibitions and requirements as opposed to vague principles.



### LOOK FOR

- Zoning that allows for mixed land uses and high density residential development.
- Zoning that allows for residential secondary suites.
- Pedestrian-oriented design guidelines.
- Commitments to community stewardship of public spaces through tree planting programs or adopt-a-park programs.
- Greenway and Urban Forest Strategies that expressly address environmental protection as well as human transportation and recreation.
- Development Permit Areas (DPAs) that encourage intensive residential or multi-family residential development, preferably in areas of existing development including existing village centres. DPAs are also used to protect sensitive environmental features, and people and property from natural hazards – not all DPAs will encourage intensive development.
- Affordable housing targets.
- Policies that support infill and brownfield instead of greenfield development. These can be reflected in commitments to prioritize downtown development or revitalization initiatives over suburban development.
- Commitment to reduce the percentage of paved surfaces in watersheds, or support ground recharge of stormwater depending on soil conditions or proximity to potable ground water sources.

### Example OCP Process





### **Parks, Recreation and Culture Master Plans**

The planning of a local government's natural and cultural assets are sometimes rolled into one Master Plan, or alternatively, sometimes divided up into several different master plans. Parks, Recreation and Culture Master Plans are therefore sometimes called Parks and Recreation Master Plans, Parks and Trail Master Plans, or Culture and Heritage Master Plans. Together, these plans guide local government in the provision of greenspaces, natural resources, recreation facilities, and cultural services over the long term. They are typically updated after 10 years.

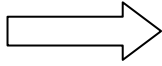
A master plan provides a framework of goals and policies, including mapping of preservation and conservation priorities, a service implementation program, and budget requirements. Park plans affect urban development by creating constraints through protection designations, as well as create a fabric of protected and useable park areas. They also provide opportunities for urban development to integrate local landscapes, and offer guidance on how to increase the social and cultural capital of a community.

Parks, recreation and culture master plans serve a variety of functions related to health in the built environment. By planning for the protection of natural spaces, they help protect 'ecosystem services' that are important for human health. Examples of these services include:

- Forests that help filter air borne particulates, reducing air pollution, and absorb carbon which reduces climate change impacts.
- Natural surfaces that help reduce/slow stormwater flow, filter water pollutants, and recharge aquifers.
- The provision of habitat for pollinators such as bees and other insects. Pollinators are essential for successful food crops. Other insects contribute to the biological cycles that minimize the need for pesticides and contribute to the food chains so important to biodiversity.

Parks, recreation and culture master plans will often address a range of community safety concerns, including flood control, playground safety, and the safe use of public spaces. Physical activity and community cohesion are often key elements. The availability of recreational facilities and outdoor spaces affects levels of physical activity. Natural areas and park spaces have been shown to reduce stress levels, and provide places for communities to gather and strengthen social networks. Community stewardship programs provide additional community-building opportunities while offering participants low-impact exercise options that are suitable for the whole family.

The planning process for a Parks Master Plan typically involves consultation with government staff and council, community stakeholder groups, and the general public. Information from stakeholder groups (to identify issues and geographical areas of concern) is solicited through a variety of mechanisms from workshops to individual interviews, while an Open House towards the end of the process is typically provided to secure feedback on the proposed implementation plan.



## GET INVOLVED

When deciding where to get involved in a Master Parks Plan process, you may want to participate in the more detailed design work as well as in the planning activities, as the details can dramatically affect usability of a parks system.

- Approach the Director of Parks and Recreation to discuss the importance of health issues vis-à-vis parks and recreation planning, and request the opportunity to participate in stakeholder interviews during the planning process.
- Attend Community Public Events, such as Open Houses, providing feedback on the ways in which the proposed plan addresses the short and long term health of the community.
- Make a presentation to council on the importance of securing interconnected park spaces, system-wide trails, and residential proximity to open spaces and recreational facilities. Use the council presentation to either 'prime' council on issues they should be aware of during the planning process, or to provide feedback on the proposed plan and/or feedback on other major park plans, operating and capital budgets.
- Work through the Directors of Planning and Parks, Council and the City Clerk's office to secure a seat on the Environmental Advisory Committee (EAC) or Parks and Recreation Advisory committee or equivalent committees or commissions in your area. These bodies typically provide input to council on local environmental issues including the impact of new developments and opportunities to secure high value park space.
- Act as a resource for community groups – environmental not-for-profits, resident associations, heritage conservation organizations, recreation groups, etc. – who are providing feedback to the Parks, Recreation and Culture planning process, ensuring they have accurate information/data regarding the linkages between health and the built environment.
- Participate in Sustainability or Climate Change Task Forces. Advocate for better protection of open space, more greenway and trail development, increased resource allocation to community programming that supports active living, increased opportunities for non-motorized transportation, increased access to natural areas by children, increased carbon sequestration, and improved water and air quality by securing ecosystem service provision.

### ***Greenspace Standards***

In England, there is widespread awareness of the importance of natural areas to healthy communities. Planners are applying ANGSt – Accessible Natural Greenspace Standards. These demand that no person should live more than 300m from the nearest natural area of at least 2ha in size and that there should be a minimum 1ha of Local Nature Reserve/1000



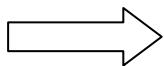
### LOOK FOR

- Residential proximity to parks, trails and other open space – 5 minute walking distance or 400 meters.
- Recreational trails that offer varying degrees of use and level of challenge (paved and natural material trails, variety of distances, variety of heights to climb) to ensure equitable access for diverse users.
- A mix of indoor and outdoor recreational facilities.
- Support for community stewardship programs ranging from tree-planting and adopt-a-park programs to community gardens and public traffic circle plantings.
- Interconnected network or web of protected greenspaces instead of isolated ‘pockets’ of protected lands that provide for ecosystem services and sensitive habitats.
- Urban forest strategies designed to protect and/or expand the existing tree cover in a local area.
- Cultural programs that include community development investment, and outreach and engagement strategies for diverse cultural groups.

### Local Area Plans

Local Area Plans, sometimes called neighbourhood concept plans, are more detailed plans one step down from the OCP. Local Area Plans must reflect the Official Community Plan. They deal with specific implementation concerns, and respond to shorter range and immediate issues including development proposals. Local Area Plans lay out goals, objectives, policy statements and design guidelines.

A Local Area Plan can be triggered by a development proposal. If a developer submits an application in an area designated as a Growth Area in the OCP, but which has no existing Local Area Plan, a municipality may request a developer to pay for the planning process while the municipality leads the public consultation and prepares the plan.



### GET INVOLVED

- Attend the Open House public consultations.
- Act as a resource to neighbourhood associations who are preparing coordinated responses to area plans. Ensure neighbourhood associations have correct information and data that reflect healthy built environment priorities such as

mixed-use, higher density neighbourhoods well serviced by public transit and open space systems.

- Coordinate with the Planning and Parks Departments to make a presentation or meet with the lead developers who may have triggered a local area planning process. Present healthy built environment messages along with strong business case information to the developers.
- Make a presentation to council on the specific healthy built environment imperatives associated with a particular local area plan. For example, an area plan that includes land in a developer's inventory and that has been triggered by a greenfield development proposal may be requested to accommodate significant greenspace protection, a cluster development approach, and strong public transit linkages to other urban centres.



### LOOK FOR

- Higher density targets and mixed use zoning.
- Zoning for commercial development that supports easy access to grocery stores (as opposed to fast food restaurants) providing a range of healthy food choices – residential development within a 10 minute or 400m walk to grocery stores. This is especially important for low income neighbourhoods.
- Prioritization of infill and brownfield development over greenfield development.
- A range of housing types that support people at all stages of life (single adults, young families, empty nesters, and seniors), and with varying levels of income.
- Greenspace protection opportunities including support for cluster development, the use of various tools to put protection in the hands of local government and conservation groups, and greenway linkages designed to protect plant and animal habitat as well as provide for alternative transportation.
- Development Permit Areas (DPAs) that restrict development on hazardous landscape features such as steep slopes, and that steer development towards concentrated nodes.
- Stormwater/rainwater control that works with natural systems – use of swales, rain gardens, and a policy commitment to reducing paved surfaces within the watershed.

- Narrower street pavement widths, keeping in mind that wider street rights-of-way are needed to accommodate broad sidewalks, and generous boulevards for planting.
- Reduced parking requirements, along with greater access to bike paths and adequate public transit service.
- Street connectivity – grid pattern street layout instead of cul-de-sacs.
- CPTED (Crime Prevention Through Environmental Design) principles to guide park space and greenway design.

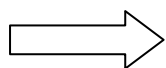
**Zoning Bylaw Changes** (*see Site Level - Development Applications for information on appeals and permits*)

Zoning bylaws – sometimes called land use bylaws – put the OCP into effect. They translate OCP principles and strategies into a set of regulations, land controls and development requirements. New zoning bylaws are passed by Council after consultation with the public and interested agencies. Once passed, the bylaw specifies the *type of use, density, and siting and size requirements* of buildings and structures, and the allowable land use. A zoning bylaw will also specify permits required for construction and development standards. Zoning bylaws must conform to the OCP.

Once passed, however, bylaws can be both amended and subject to variances. (*See Site Level Plans, p. 46 for more information on variances*). A municipality can amend a bylaw, for example, by rewriting landscape regulations or development guidelines. Sometimes this is in response to the desire of a local government to meet newly introduced sustainability targets, sometimes an amendment is in response to development pressures coming from either citizens or developers.

The development of, or amendment to, a zoning bylaw usually provides an opportunity for a Public Hearing where comments and concerns can be expressed. A local government is required to hold Public Hearings on bylaw changes unless the area to be affected is covered by and consistent with the OCP. In addition, a local government may refer a zoning bylaw to an Advisory Planning Commission for comment.

The involvement of Health Professionals in the creation of a subdivision and development service bylaw can be a strategic use of energy and resources, as this bylaw then sets out requirements for the entire area to be developed.



### GET INVOLVED

For health professionals, it is far more strategic to get involved with zoning bylaw amendments and reviews than it is with development permits or appeals. Local governments can amend zoning bylaws and establish a range of requirements. At the development permit or appeal stage, a local government cannot ask a developer to conform to requirements that have not already been laid out in the OCP and zoning bylaw.

- Secure a seat on the Planning Commission, to review proposed bylaw amendments.
- Educate developers so they build healthy communities. Partner with a local PIBC chapter, UDI, or Real Estate Board to host an information session for developers on design considerations. Knowledgeable developers interested in supporting healthy communities may be less inclined to request development variance permits, or request permits that do not advance healthy built environments.
- Educate planning staff and approving officers so that they either amend appropriate zoning bylaws themselves, or make appropriate recommendations concerning development variance permits.
- Attend the Public Hearings for zoning bylaw changes. Express your concern, support or recommendations for the proposed changes.



### LOOK FOR

- Either very low or higher density requirements. Very low density requirements (ex. low floor space ratios (FSRs) on 20 ha lot sizes, especially those outside an urban containment boundary) can help maintain greenspace and ensure watershed protection. Greater air and water quality result, and with the introduction of recreational opportunities such as trails, invite active participation in outdoor activity.
- Higher density requirements, when accompanied with mixed use zoning, help create more compact communities where live, work and play opportunities coincide.
- Allowances for mixed use.
- Allowances for cluster development or infill development.
- Continued protection of agricultural land.
- Allowances for a range of housing types, and the provision of secondary suites.
- Off-street parking and landscaping standards.

### Subdivision Plan, Review and Approval Process

A subdivision **plan** is a legal document that divides a piece of land into smaller surveyed lots, which can be sold separately. A subdivision plan is prepared by landowners considering subdividing their

land. The plan will show the proposed location of property lines of individual lots, parks and other recreational facilities, setbacks from environmental features or hazards, roads and schools.

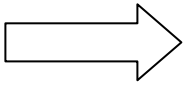
A subdivision **review** is conducted when a subdivision application, plans, reports and application fee are submitted to a planning or development services department and the Approving Officer - or Ministry of Transportation in areas not governed by a municipality. A subdivision plan submitted as part of an application for development is a more detailed plan one step down from a local area plan. However, an application for subdivision development in an area without a local area plan may trigger the need for an area plan to be completed. See above for more information on local area plans.

A typical review process would have an application, once received, forwarded to other relevant city departments, a Subdivision or Development Review Committee made up of city staff, and external agencies for comment. External agencies may include the Provincial Ministry of Environment and the Federal Department of Fisheries and Oceans. The Subdivision Committee may require an applicant to supply further information, such as a tree survey, proposed dwelling plans or a traffic impact study. The Committee may refer the application to the neighbouring property owners for comments if the committee is concerned that a neighbourhood's amenities may be negatively affected by the proposed subdivision. Note that the LGA does not require subdivision plans to go through a public consultation process if it is felt that the public has already had an opportunity for input at the OCP stage.

The Subdivision Review Committee ensures that standards are met in a number of areas. These may include:

- City policies, including OCPs;
- Lot sizes;
- Building setbacks;
- Roads, lanes, walkways, fire lanes;
- Greenspaces, habitat protection areas, parks;
- Future subdivision potential of neighbouring properties;
- Sewer, water, street lights, and other services;
- Neighbourhood amenity preservation;
- Compatibility with adjacent uses of land.

Once the requirements of the Review Committee and Approving Officer are satisfied, a preliminary approval is granted, usually with conditions. The applicant is then responsible for completing the conditions to the satisfaction of the Approving Officer (City of Coquitlam 2002; Evergreen 2005).



## GET INVOLVED

- Participate as an external reviewer, and request appropriate additional studies such as traffic impact reports, as needed. Becoming an external reviewer requires securing a place on the reviewer's circulation list. This is a negotiated agreement between the health authority and a municipality, and participation may be contingent upon a municipality's existing service agreement with the local health authority
- Meet with the Approving Officer to explore their interest in requiring applicants to report on how the plan meets healthy built environment goals.
- Act as a resource to local neighbourhood associations or citizen groups in areas impacted by a subdivision application, providing them with health and built environment information that may better inform their support or concerns.

An approving officer has the discretion to request applicants to provide special reports. Many existing sustainability or smart growth checklists (*See Appendix G*) contain planning targets and considerations for achieving healthy built environments. Encouraging the approving officer and developers to use these lists can result in both educational and on-the-ground benefits.

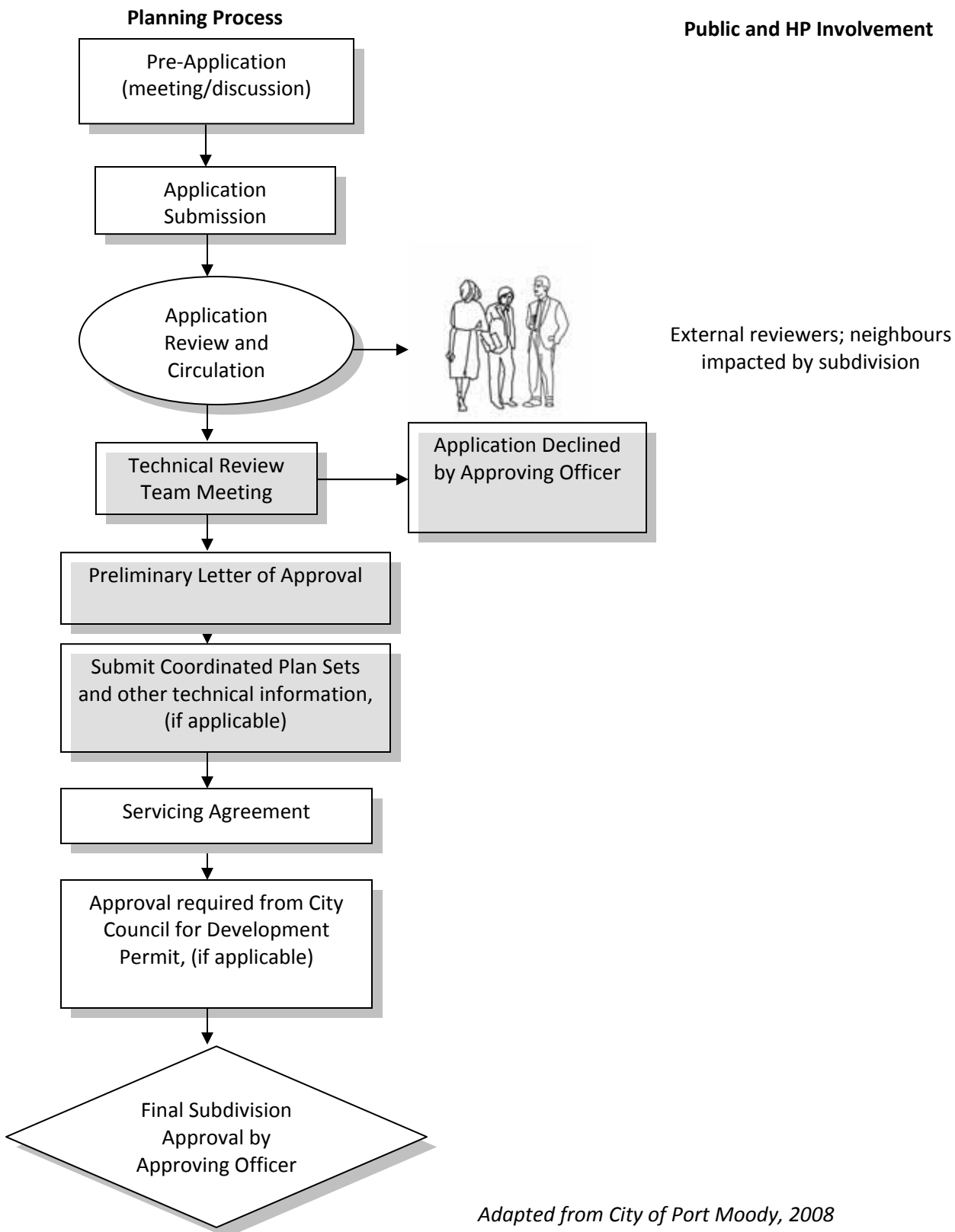


## LOOK FOR

- The application of CPTED principles.
- Smaller building setbacks and garages at the backs of houses. This helps encourage community interaction at the street level.
- Retention of street trees and trees on individual lots. These contribute to a healthy urban forest, reductions in air pollution, and more liveable neighbourhoods.
- Pedestrian-oriented design – grid pattern instead of cul-de-sacs, sidewalk requirements, narrow street widths and safe street crossings.
- Reductions in parking supply, complemented by increases in transit service and access to commuter trails and walkable streets.



## Example Subdivision Approval Process

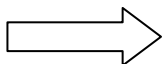


*Adapted from City of Port Moody, 2008*

### Annual Operating and Capital Budget Review Processes

The capital expenditure plan is a municipality's spending plan for major, non-recurring projects. These plans are mandatory and explain how a municipality will pay for all its new capital projects (WECL 2001). Plans must be adopted by council, by bylaw, and cover a three to five year period. In some places such as Vancouver, the plan must also go out to a public vote. The plan will address OCP designations such as future acquisitions for park land or highway development - infrastructure extensions and the acquisition of private land for public purposes are often key components. The adoption of annual operating plans and capital budgets occurs early in the new fiscal year (typically January to March). Most local governments provide opportunities for review and discussion of the annual operating and capital budgets as well as the long term capital budgets.

Health Professionals can provide input into expenditure planning, helping to ensure that budget expenditures reflect the development of active living opportunities and the protection of sustainable natural areas. As both operational and capital budgets include the planning and the plans to be executed, they are good mechanisms for ensuring the mission and stated objectives of the Council find their way into actions. If Council has made a commitment to creating healthier built environments, the budgets will reflect this commitment.



#### GET INVOLVED

- Contribute in person or via written submission to Council, comments on the annual operating and capital budgets, and the 5 year capital budget.
- Participate in referenda discussions when major capital projects that require specific tax support are being reviewed.
- Work with Councillors – building relationships outside of Council Chambers as well as making presentations to the Council committees – to secure their commitment to creating healthier built environments.



#### LOOK FOR

- Budget allocations to parkland acquisition, trail right-of-ways (ROWs) and trail maintenance
- Budget allocations to the development, implementation and maintenance of greenways and urban forests.
- Budget allocations to the stewardship and hands-on environmental education in the community

## Local Transportation Plans

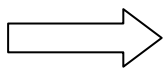
Local transportation plans address road and transit management. They provide municipalities with timelines and priorities for capital budget expenditures, and guide the design of road, bus and cycling networks at the local level. They are developed by a municipality, typically out of the engineering department.

Specific, local (or sub-regional) transit plans are developed by Translink (Lower Mainland), and BC Transit elsewhere in the province. Transit Business Plans are developed by BC Transit in collaboration with municipal or regional government staff, and community stakeholders. There is also typically an annual Service Review process for BC Transit Services. A general Transit Committee made up of local government staff, a BC Transit representative, and the private company delivering the service, provides guidance and develops plans in response to the Service Review results.

In areas where neither a single municipality nor regional government is the logical provider of transit services, a Transit Commission can be established. A Transit Commission would be responsible for establishing a transit plan.

Good transportation planning goes hand in hand with good land use development policies. Recent research has found that as residential density increases in urban environments, per capita hours and kilometres of automobile travel tend to decline, while walking, biking and transit tend to increase (Frank, Kavage, Litman, 2006). This assumes that there are transit networks in place that support public use. Other research suggests that the use of transit promotes physical activity, since most transit trips involve walking or cycling links. A U.S. study found that ‘transit users spend a median of 19 minutes per day walking to transit – over half the 30 daily minutes recommended by the Heart and Stroke Foundation (Frank, Kavage, Litman 2006 pg.16).

Transportations plans that support convenient public transit and that provide safe cycling networks for commuters and recreational cyclists are important to healthy built environments – and need to be developed within the larger land use context. Transportation plans need to be developed and integrated with local area plans and OCPs that promote compact, mixed use communities.



### GET INVOLVED

- Decisions affecting municipal transportation plans are often made through the OCP and Capital Expenditures decision-making processes. Look for opportunities to support appropriate transportation initiatives while attending public meetings or sitting on committees providing input into other land use or budget decision-making.
- Some municipalities establish Transportation Advisory Committees (TAC). Secure a seat on the TAC.
- Other advisory committees such as a Bicycle Users Group provide input on specific elements of a transportation plan. Secure a seat on or more of these committees, or request to be sent minutes of the meetings to help you monitor transportation planning initiatives. The minutes will help you determine when to

become further involved in local transportation planning, as particular neighbourhood transportation plans and issues come up for review.

- For input into annual Service Reviews conducted by BC Transit and a Transit Committee, or to explore the possibility of a Transit Feasibility Study to determine potential service provision, contact: municipal or regional Director of Planning; BC Transit Planning Managers Mike Davis (Capital Regional District - CRD) or Megan Hill (communities outside the Lower Mainland and CRD).



### LOOK FOR

- Traffic calming measures.
- Transit Priority measures such as bus bulges – these prioritize bus infrastructure over automobile-oriented infrastructure.
- Commitments to maintaining and improving roadside transit infrastructure such as bus stops, shelters and benches.
- Transit routes that enable people to easily access work centres, park spaces, grocery shopping.
- Short distances from residences to transit stops, and transit stops to work locations.
- Bus options that support seniors (drop ramps that allow for wheelchair access) and multi-modal transportation (buses with bike racks).
- Integration of transit plans from the municipal to regional level.
- Trip reduction programs.
- Enhanced pedestrian and cycle safety measures.
- Streetscape improvements (i.e. lighting, planting, signage, sidewalks) that would make the area more attractive for pedestrians.
- Optimization of total tree canopy opportunities.

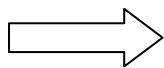
### Waste Management Plans (solid and liquid)

Health Professionals are currently involved in the review of liquid and solid waste management plans. These plans can be developed and implemented at both the local and regional level. Liquid waste management plans in particular have an impact on healthy built environments. Management plan recommendations not only address the environmental impacts of waste water treatment and disposal, they also have a significant impact on rural and urban density. The outcome of waste

management planning exercises often dictate the size and number of parcels - much of which is driven by the capacity of the land to support utilities required to service new developments and their population targets.

Integrated Stormwater Management Plans (ISMPs) are often a component of a Liquid Waste Management Plan. ISMPs will typically include ponds, swales, trails and greenway systems that not only help manage stormwater but also provide community enhancement contributing to social cohesion, active recreation opportunities and direct access to nature with the health benefits that this provides.

## GET INVOLVED

**GET INVOLVED**

- Health Professionals are already involved in reviewing Liquid Waste Management Plans, typically through the Technical Liquid Waste Advisory Committee. The Provincial Ministry of Environment, Environmental Protection Division, Liquid Waste Management Guidelines specify that a health representative should be a member of this committee.

## LOOK FOR

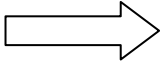
**LOOK FOR**

- Urban forest canopy coverage targets.
- Reductions in impervious surfaces in watersheds.
- Recommendations to use bioswales, rain gardens and other stormwater management mechanisms that take a green infrastructure approach.
- Stormwater detention pond designs and placements that recognize multifunctionality – ponds that can be used for stormwater management and as a community amenity.
- Co-creation of trails and protected natural habitats in the stormwater management process.

**Watershed Management Plans**

Watershed Management Plans can be drafted for urban and non-urban watersheds. They are documents developed co-operatively by government agencies and other stakeholders to manage the water, land/water interactions, aquatic life and aquatic resources within a particular watershed, in order to protect the health of the ecosystem as land uses change. It recommends how water resources are to be protected and enhanced in relation to changing land uses (Niagara Peninsula Conservation Authority). In some cases, Watershed Management Plans are developed only for those areas designated as drinking water sources, even though water and aquatic resources typically extend far beyond these designated areas. Watersheds protected as the source of drinking water supplies typically do not allow for public access, and are often large wilderness or natural areas.

Watershed Management Plans are typically incorporated into OCP and Local Area Plan documents. They can have their own community-based planning process (e.g. Millard-Piercy Watershed Management Plan. *See following website for plan copy:* <http://www.realestatefoundation.com/community/millardpiercy/wmpcurrent.pdf>) or be part of an OCP or Liquid Waste Management planning process.



## GET INVOLVED

- Health Professionals are already involved in the review of Watershed Management Plans, for those areas designated as drinking water sources and regulated by the Drinking Water Protection Act and Drinking Water legislation.
- For Watershed Management Plans that are broader in scope, consider:
  - Task forces, committees or forums established to help guide plan development.
  - Appropriate Advisory Committees to Council (Environment, Transportation, Parks and Recreation).
  - OCP Open Houses and stakeholder consultations via committees or interviews.
  - Local Area Plan consultation opportunities.



## LOOK FOR

- Reductions in impervious surfaces including lengths of roads. Reducing impervious surfaces will increase levels of water filtration and successful erosion control, decreasing contamination of drinking water supplies.
- Tree and urban forest protection strategies and policies.
- Wetland protection policies and strategies – this includes designating wetlands as environmentally sensitive features and attaching development permit areas (DPAs) to wetland areas.
- Low impact development standards that support the use of green infrastructure features such as bioswales and raingardens.
- Sensitive public access through trails and greenway linkages.
- *(The following consideration applies specifically to those watersheds protected for drinking water security.)* Opportunities to increase controlled public access that facilitate physical activity and direct connections with nature. Some of these

opportunities may be connected to trails or walkways associated with dam and reservoir infrastructure; educational public tours; and support for active watershed stewardship groups.

### **Airshed Management Plans**

Airshed Management planning is undertaken jointly by local governments, the Ministry of Environment, and Health Authorities. Airshed Management Plans attempt to reduce particulate matter emissions and ozone production. “The Province has primary authority through the Environmental Management Act (EMA), which enables the Ministry of Environment to develop air quality standards and guidelines, regulate point and area sources, and require the preparation of area based management plans” (MO 2007). Municipalities are important participants, as they can pass bylaws that “directly regulate air emissions through nuisances, environmental protection and public health” (Alderson 2007). Airshed management plans typically identify key local government actions, and can include the use of zoning and other land use planning tools to direct development away from air quality problem areas, along with other bylaws and best practices that help reduce existing emissions. The Provincial Ministry of Environment has provided a Framework for Airshed Management Planning, and recommends the following process be followed.

Step 1: Evaluate the need for a plan.

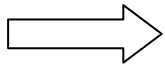
Step 2: Identify and engage stakeholders.

Step 3: Investigate planning synergies.

Step 4: Determine priority sources.

Step 5: Develop the plan.

Step 6: Implement, monitor and report.



### **GET INVOLVED**

- Typically, one or more multi-stakeholder committees are formed to administer and guide the airshed planning process. A health professional may participate in one or more of these committees.
- The Provincial Framework suggests that a local champion who can lead the process and galvanize support is important to success. While a Health Professional may become such a champion, it may be more strategic for a local government staff person to act as a champion, given the importance of integrating Airshed Management Plans with other Land Use and Community Energy Plans.


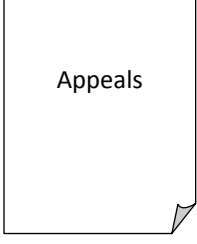


## LOOK FOR

- In communities where the source priority is industrial emissions and there is an emphasis on separating industrial and residential zones to reduce health impacts, look for opportunities to increase public transit or Transportation Demand Management (TDM) initiatives that reduce Single Occupancy Vehicle usage.
- In communities where the source priority is emissions from transportation, look for:
  - Integration with Community Energy Plans, climate strategies, and transportation plans that support increases in public transit.
  - TDM recommendations including travel incentives and disincentives (e.g. universal transit passes for post-secondary students; increased parking fees).
  - Tree canopy targets and tree protection bylaws.
  - Greenways that support alternative transportation such as walking and cycling.
  - Integration with land use plans that support the development of town centers.
  - Higher density and mixed use zoning that encourages more compact communities.



## Site Level

PLAN or PROCESS	Policy	INVOLVEMENT OPPORTUNITIES
	E.g. Complete community policies	Municipal reviewers list
	E.g. Building envelope restrictions and siteline policies	Board of Variance

### Development Applications and Approvals

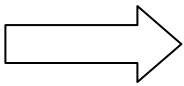
There are three different types of permits that can be issued for development:

- Development permits, which limit development in a designated area until the permit has been obtained.
- Temporary industrial or commercial use permits, used to temporarily vary zoning bylaws to accommodate industrial or commercial uses in an area.
- Development variance permits. (WCEL 2001)

A development permit is required when a development is proposed within a Development Permit Area (DPA). The guidelines for development in DPAs are found within the OCP and the zoning bylaw. The LGA allows municipalities to require development approval information from an applicant on the likely impacts of the proposed development, and requires local governments to set out the policies and procedures by which such information is secured. Development Approval Information will typically include information on transportation patterns, local infrastructure, public facilities such as schools and parks, community services and the natural environment (WCEL 2001).

Some municipalities have taken advantage of the Development Approval Information requirement to put in place Social and Environmental Review Processes. These processes help educate applicants, and allow a municipality to better understand the impacts of a development before granting approval.

Development Variance Permits are covered below under Appeals.



## GET INVOLVED

- Request to be included on the municipal reviewers list.
- Work with the planning department to determine if there is an opportunity to introduce healthy built environment considerations into Development Approval Information requirements and/or development checklists. This necessitates that the are existing DPAs and Development Approval Information policies and procedures in the OCP and land use bylaw.

Note that it is more strategic to address development permit areas and design guidelines at the OCP level. It can be difficult at the development application stage to ask for development patterns, density and design which deviate from what is approved in the OCP and which a developer has abided by in their application.



## LOOK FOR

- Location and proximity of development to greenspace – functional parks and trails that welcome public visitation, access to natural open space, and both active and passive recreation use.
- Proximity of proposed development to grocery stores that provide a range of healthy foods (5 minute walking distance).
- Streetscape design that welcomes community interaction – ex. garages at the backs of houses; smaller setbacks.
- Pedestrian-oriented design including sidewalks with saw-cut joints and curb bulges.
- Application of alternative development standards – particularly stormwater control using swales and rain gardens which improve water quality and the aesthetic appeal of neighbourhoods.
- Infill development that is in keeping with the character of the neighbourhood.
- Tree protection on site and on the street.
- Proximity of major arterials, ensuring the development allows for safe entry/exit for people of all ages.

## **Appeals**

Sometimes a property owner will claim “undue hardship” in conforming to a zoning bylaw, and request a minor variance. This request, or appeal, goes to a Board of Variance, where a property owner may be granted leave to not comply with every nuance of a bylaw. In some cases, a property owner may request a development variance permit. This type of permit is not restricted to a ‘minor variance’ from the bylaw requirements, and the property owner does not need to demonstrate ‘undue hardship’ as in a bylaw appeal to the Board of Variance. If a local government grants too many development variance permits, the goals of an OCP can be undermined (WCEL 2001).

There are no formal Public Hearing requirements for development variance permits. It is important for Approving Officers and planning staff to have a good understanding of the requirements of a healthy built environment, so that these can be applied to recommendations on development variance permits.

Typically, an appeal made to the Board of Variance is so site specific, and involves a minor variance to set zoning bylaws and development standards/guidelines, that intervention at this stage is not considered strategic. However, a Board of Variance will hear an appeal from a developer and allow for members of the public to provide their comments during a Public Hearing. In cases where a health professional believes that a variance will unduly harm a community, the Public Hearing is the last opportunity to voice concerns and opposition. Make sure that you present your arguments within the context of the zoning bylaws and OCP guidelines that govern the area affected by the development.

## **Strategies**

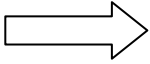
Strategies refer to those plans that are delivered and designed at multiple scales, and as both stand alone strategies as well as part of one or more of the plans described above. Greenways, Urban Forest Strategies and Bicycle Plans are often developed as part of an OCP or Parks Master Plan. Sometimes they are initiated or further developed through a Local Area Planning process. They can be localized plans, or span multiple municipal jurisdictions. Neighbourhood Nodes or Town Centres can be developed, and are usually supported, through a Regional Growth Strategy or Transportation Plan.

### ***Greenways***

Greenways are linear green corridors that connect areas of greenspace such as parks and nature reserves to help retain functioning ecological processes (plant and animal movement corridors and habitat; flood control; filtering of water-borne pollutants) and recreational opportunities for pedestrians and cyclists. In some urban areas, greenways also connect cultural features and historic sites. Greenways can include trails, or in instances where greenways include sensitive ecosystem features, have no public access. They can include public holdings and private working landscapes. Recreation linkages are often created using parks, ridgelines, rights of way, streets, lanes and unorganized greenspaces.

Greenways can be region-wide and initiated at the Regional District level. They can be city-wide, and initiated by local government. In some instances, such as in the City of Vancouver, there are also neighbourhood greenways, designed to connect local amenities such as schools, libraries and pocket parks, and are initiated by neighbourhood residents. Neighbourhood greenways are typically shorter in distance and often uniquely express a local community’s identity.

The planning process for developing a Greenways Strategy or Plan differs, depending on the type of greenways and the scale at which the network is planned. At the municipal level, it is common for a task force or steering committee to be struck to help guide the development of a plan, and usually an extensive public consultation process is undertaken to solicit feedback from local citizens. The design of the greenways system and an internal review of the proposed network is typically conducted by staff in Engineering and/or Parks and Recreation Departments, with input often provided by the Planning Department.



## GET INVOLVED

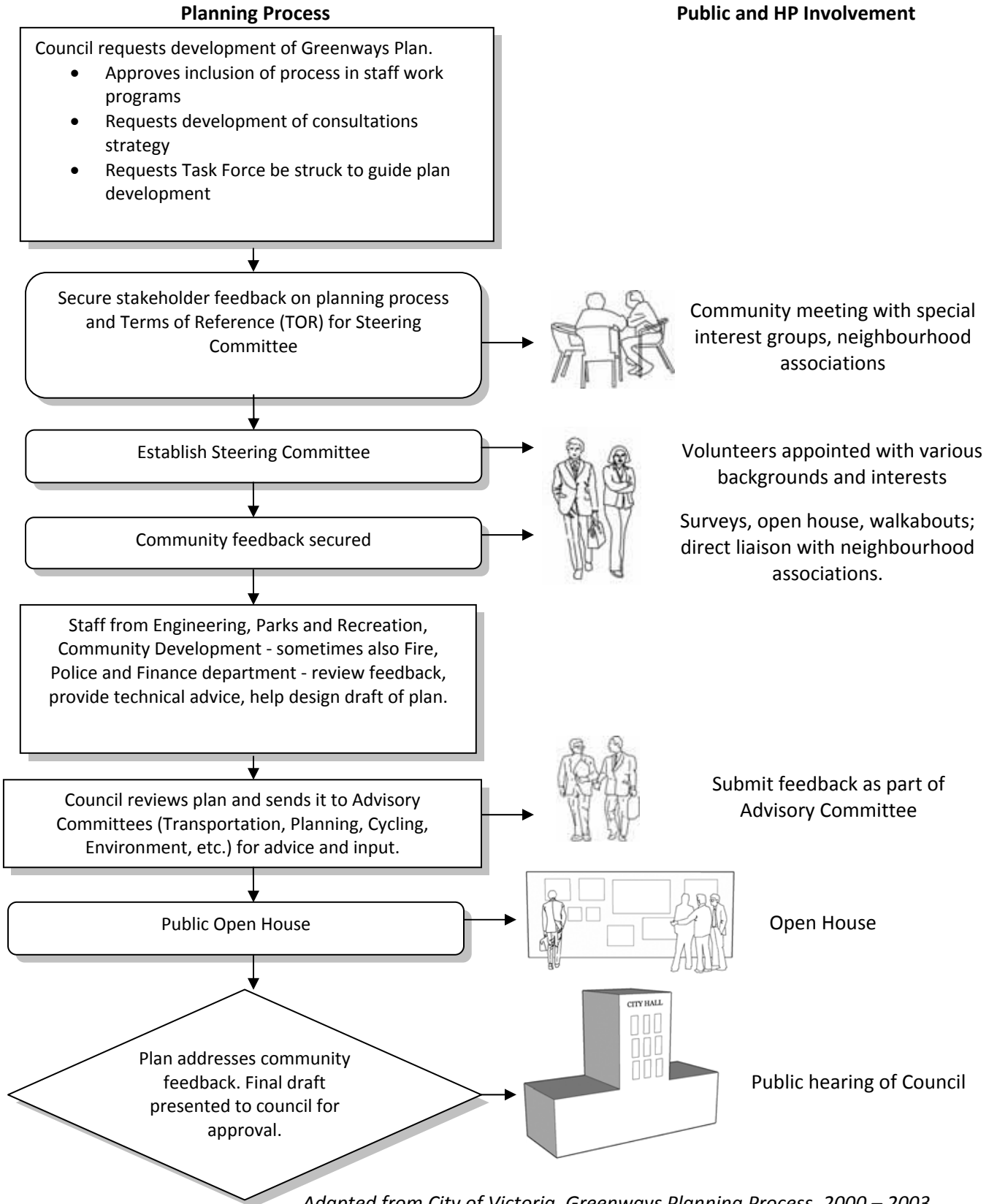
- Participate as a Task Force or Steering Committee member. Contact your Engineering, Parks or Planning department to confirm opportunity to participate as a stakeholder.
- Attend public consultations including Open Houses to provide feedback on draft plans.
- Participate on the relevant Advisory Committee to Council – such as the Environmental Advisory Committee or Parks and Recreation Committee – who will often provide input to the plan.
- Present to Council your feedback on the draft plan, or encourage Council to consider launching the development of a Greenways Strategy in your region, if one does not already exist.



## LOOK FOR

- Riparian zone protection/large setbacks that protect streams and creeks and allow space for safe trail development along waterways.
- System-wide connections. Greenways should link to each other as well as other greenspaces.
- Supporting tree bylaws and open water policies.
- Provisions that give the local approving officer a mandate to procure trail right-of-ways (ROWs) during subdivision.
- Open space protection *combined* with recreation opportunities. Many times, the 'green' has been left out of greenways that become only alternative transportation routes.
- Designated greenway sections that help to limit development on floodplains and groundwater recharge areas.

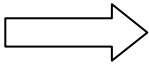
## Example Greenways Plan Process



## ***Bicycle and Pedestrian Strategies or Master Plans***

Bicycle strategies are intended to facilitate and encourage cycling within the larger scope of a general transportation system. These plans include design guidelines, maintenance, end-of-trip facilities, a capital expenditure plan, supporting programs and on-going monitoring coordinated within a coherent network. The bicycle network should provide direct access for cyclists to major destinations within a municipality such as schools, commercial centres, transit and parks. Often, pedestrian and cycle networks are undertaken simultaneously and will also include both on and off-street routes.

Bicycle network plans are a guiding tool for municipalities, and outline the long term vision supported by short terms actions that local governments use when applying for provincial and federal funding. They are designed to be updated on a regular basis, allowing the incorporation of new standards, technologies and current trip data and trends.



### **GET INVOLVED**

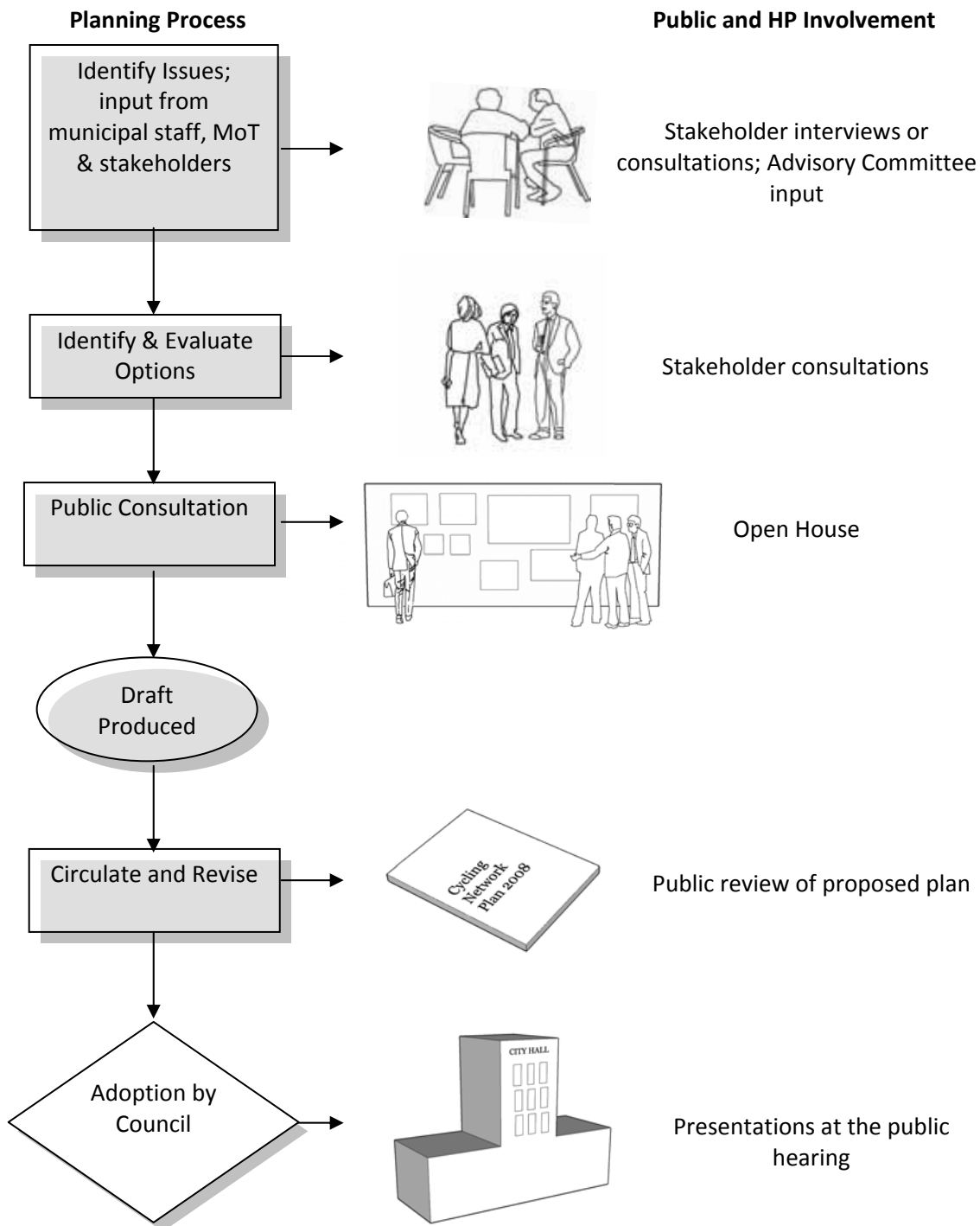
- Attend the public consultations to review and provide feedback on the proposed plan.
- Secure a seat on the Bicycle User Group or Bicycle Advisory Committee, if one exists.
- Make a request to Council to undertake a bicycle network plan if one does not exist in your community.



### **LOOK FOR**

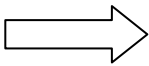
- A bicycle network that links schools, parks, places to shop and work, facilitating alternative transportation use for school, work and play.
- Design guidelines and on-road/off-road options that increase the real and perceived safety of cyclists.
- Routes that provide easy access for people with varying degrees of fitness (i.e. bicycle networks that include significant changes in elevation are not widely accessible).
- Connections with the local transit system. Whether local buses have bike racks or not, connecting the transit and cycling networks allow people to choose multi-modal options in their commute.
- Bike racks, lockers and facilities that offer showers as part of the network amenities.
- Bike network linkages with pedestrian, parks and greenway plans.

## Typical Bicycle Plan Process



## **Neighbourhood Nodes or Town Centre Plans**

Town centre plans can play a significant role in a City's growth management strategy. For many years there has been a policy in MetroVancouver, and elsewhere in BC, to encourage the development of concentrations of retail, office and housing in suburban locations called town centres. The development of major urban centres requires managing complex and diverse community interests. Land use designations are at the core of the town centre plan as the primary redevelopment and economic decision-making tool. The objectives of developing town centres include reducing the total amount of automobile commuting, creating densities that are supportive of transit and other community services, and creating more complete and attractive communities. Neighbourhood nodes or town centre plans are usually incorporated into a city's Official Community Plan, and are often identified through the development of Regional Growth Strategies.



### **GET INVOLVED**

- Participate as a stakeholder in issues identification and as a reviewer of proposed plans.
- Attend public consultations during the Town Centre Plan process.
- Recommend consideration of town centres during OCP and RGS consultation processes, and during the development of local as well as regional transportation plans.

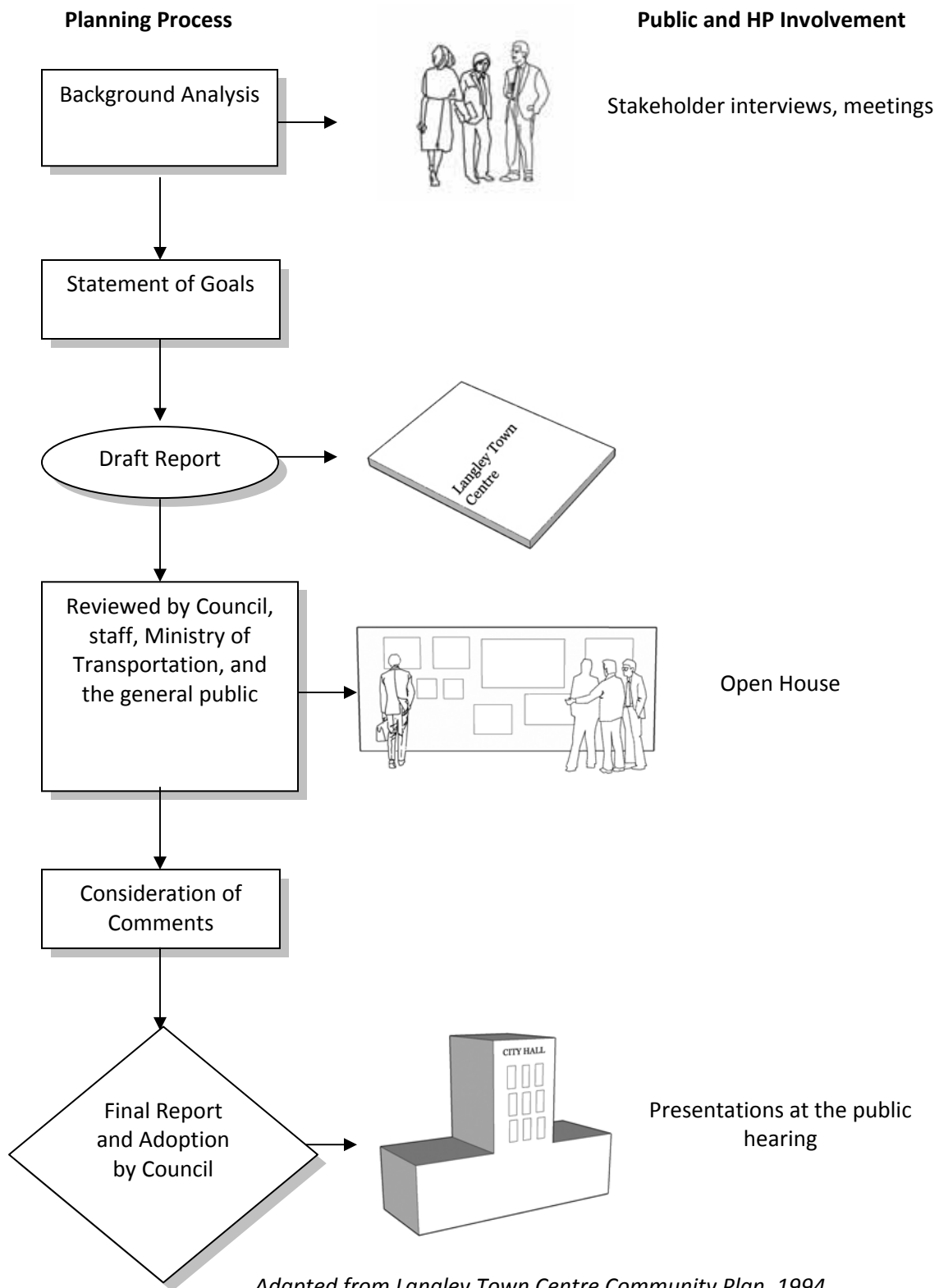


### **LOOK FOR**

- Transit-oriented, higher-density, mixed-use, high-vitality central core with surrounding development of medium-density.
- A concentration of employment and housing - hubs that support business, culture, entertainment, and community life.
- Pedestrian-oriented spaces and linkages.
- Integrated open space.
- Gradual infill and development of older industrial and commercial areas adjacent to downtown.
- Streetscape improvements (i.e. lighting, planting, signage, sidewalks) that would make the area more attractive for pedestrians
- Ground floor development that includes retail, or other public-oriented uses facing the street frontages.



## Typical Town Centre Plan Process



*Adapted from Langley Town Centre Community Plan, 1994*

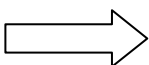
## Urban Forest Strategies

An Urban Forest Strategy is a comprehensive and practical document that establishes guiding principles and policies for the management of a city or town's urban forests – the aggregate of trees and vegetation in an urban setting. In some communities, the urban forest strategy will also include Municipal Forests and front country landscapes. Front country landscapes are rural or semi-wild areas that act as transitional spaces between urban areas and backcountry wilderness. Urban forest strategies aim to manage the urban forest as a living utility, the same as road, water systems and other necessities of an urban environment. An effective strategy or management plan will provide a number of monetary, social, health and environmental benefits to a city and its residents. In general, urban forests make a positive contribution to property values and should be considered a major capital asset. Social benefits of an urban forest strategy include improved built environment aesthetics, enhancement of the city image, and increased civic pride. Parks, greenspaces and trees not only absorb carbon dioxide and trap small and large dust particles, they also affect people's moods, activities and overall health. Research has identified the stress-reduction benefit that views of natural areas, including urban forests, can offer citizens (Kaplan and Kaplan 1998), while physical activity at the same time as being exposed to nature has been shown to have synergistic benefits such as increased self-esteem (University of Essex 2003). Urban forests provide health and environmental benefits by improving air quality and water quality, moderating noise levels and temperature, reducing soil erosion and providing critical habitat.

An urban forest strategy is particularly critical for BC communities affected by the mountain pine beetle infestation. In some towns, a wholesale loss of the urban forest has taken place and reforestation requirements are enormous.

### Urban Forests

An urban and residential area of 700 acres in size, with 20% tree canopy coverage, stores 50 tonnes of carbon dioxide annually, and saves approximately \$1.2 million in stormwater infrastructure costs.



## GET INVOLVED

- Attend public consultations if an urban forest strategy is underway in your community.
- Make a request to Council to undertake an urban forest strategy or management plan, or a private property tree protection or replacement bylaw, if one does not exist in your community. Consider linking your request to climate change imperatives, pine beetle reforestation requirements, and/or a commitment to ecosystem service provision if one exists within your council.
- Advocate for the planting of native trees and vegetation that enhance biodiversity.
- During Watershed, Liquid Waste, or Integrated Stormwater Management Planning, or during Parks and Recreation or Engineering planning processes, query options for managing and enhancing the urban forest.

**LOOK FOR**

- System-wide linkages. Ideally, the urban forest strategy should link swathes of forest using street trees, urban parks, open space on the built environment fringe to create a network of tree coverage.
- Stewardship programs that involve local citizens in replanting and tree maintenance.
- Tree canopy coverage targets.
- Tree protection and canopy coverage increases along major roadways, and around and through parks, to best facilitate the filtering of PM10, and to provide shade for pedestrians and park users. PM10 stands for Particulate Matter that is less than 10 microns in diameter, and consists of fine and course particles combined.
- Linking policies and targets in other planning documents that support the Urban Forest Strategy – lower percentage of paved surfaces in local watersheds, reduction in parking lot surfaces in residential and commercial areas.

# STRATEGIC AREAS FOR INVOLVEMENT

## Public Communications

Health professionals are highly regarded by the general public. They are seen as credible sources of information, with their only bias being a population's good health. As spokespeople, they carry significant weight. With this in mind, it is strategic for health professionals to consider greater public collaboration and involvement, and to regularly make presentations to council to ensure health remains on the policy agenda for local development.

As public and political support for healthy built environment messages grows, it will become easier for decision-makers to pass supportive policies, and for developers to consider different development patterns. As a spokesperson with a key message to deliver over time, it will be important to continually 'massage the message' with new health information as this becomes available, and to leverage it by linking to contemporary topics. Currently, climate change is receiving enormous attention and funding, resulting in greater support at the local government level for built environment changes. Many of these changes – greater reliance on public transit than single-occupancy vehicles, along with more compact, mixed use communities to reduce greenhouse gas emissions; more investment in urban forests to increase carbon absorption – also support healthy built environments. By showing how different approaches to built environments can address more than one issue, it becomes more likely that political and public support will be secured.

All this means that health professionals will need to increasingly become comfortable with straying from a regulatory emphasis. As an advocate, the health professional will be dealing with strategic communications, networking, relationship-building, and education. . . . none of which have a regulatory role.

## Plans and Planning Processes

Becoming involved in planning processes is still critical for health professionals, in addition to broadening communication responsibilities.

Of the many different opportunities available, there are five planning processes which could be considered most strategic:

- Official Community Plans
- Local Area Plans
- Re-zoning
- Parks and Recreation Master Plans
- Development applications

Official Community Plans set principles and policies that guide growth across an entire municipality or district. Ensuring that health and built environment considerations are incorporated influences the built environment across a large geographic area.

Local area plans and zoning bylaws provide on-the-ground implementation details. They are, in essence, where the rubber hits the road. More immediate and tangible changes can be secured at this level – though involvement by health professionals is required on a neighbourhood by neighbourhood basis and can demand more resources than available.

Parks and recreation plans are strategic similarly to OCPs – they set policies that are municipal/district, and ecosystem-wide. Influencing these plans can result in a much larger geographic impact than working at a site by site level. These plans also tend to be less politically charged, as they more indirectly affect development decisions.

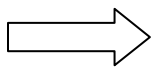
It is generally *not* that strategic to become involved in development applications – partly because too often this requires working within an existing policy context with little opportunity to significantly affect design considerations.

However, in cases where local planning departments are quite small, development applications may not typically receive the scrutiny they require. Recommendations for applying CPTED principles or improvements to trail and street connectivity can be invaluable in this scenario. In these instances, health professionals can play an important role in capturing elements missing from an application, that are still in keeping with OCP guidelines, and that can better create healthy built environments.

In addition to specific plans and planning processes, grant applications offer another strategic opportunity to affect built environment decisions. From requesting infrastructure support to funding for ‘spirit squares,’ bicycle plans, or amenities that support physical activity, local governments often have to prepare grant applications to the provincial or federal government, or even not-for-profits. Health Professionals can provide planners, engineers and parks department staff with assistance on completing the application, offering up-to-date health information. Often, health information can help make a compelling argument for a particular project, and many local government staff would welcome the support in completing oftentimes onerous applications. Contact department representatives within your local government(s) to inform them of your availability and what you can offer.

## **Know your community**

To best decide upon the most strategic entry point for involvement, health professionals need to **know the community**. This information will allow health professionals to be opportunistic and can help in deciding at what level they want to impact change.



Before deciding where to put your energy promoting healthy built environments, ask yourself:

- Does your community have a small planning and development department, with limited staff capacity?

If so, you might want to get involved with specific projects to ensure that more comprehensive reviews of development applications take place.

- Does your community have an OCP review or a parks master plan process coming up?

If so, you may want to take advantage of the formation of various committees and public consultations. Ensuring that health considerations are reflected in

policy statements makes it easier to pass bylaws, etc. that support on-the-ground change for healthy communities.

- Are there re-zoning processes in play, and are these for large neighborhoods?

Other questions that might be important to ask include:

Are there resources available to enable a health professional to participate in multiple – and if so, how many - re-zoning processes?

Are there particular neighborhoods that are more strategic to become involved in than others – i.e. greater potential to link to an existing trail network; a new greenfield development that pushes the urban boundary far beyond the existing one; a re-zoning that would have serious consequences for the protection of existing ALR land?

- Is your community 'built out'?

This means that there are no more greenfield opportunities left in your community – and that only in-fill development is available. Oak Bay (Vancouver Island) and Vancouver are two examples of built out communities. If your community is not doing any more greenfield development, working at a neighbourhood area plan level (and within rezoning processes) to affect development decisions would be strategic.

There may be other questions important for a health professional to pose. The more one knows about one's community, the easier it will be to decide on the most strategic course of action.

# TOOLS, TARGETS AND INDICATORS

## Tools and Considerations for Application

There are a host of different tools that local governments can use to create healthier built environments. Understanding what these tools are, and targets that the tools can achieve, can assist you in reading plans and policies, and assist you in recommending strategies to local governments. Different tools are applied at different scales. For instance, Official Community Plans are tools used at both the regional and municipal scale, while Conservation Covenants are typically used at the site development scale.

### Official Community Plan (OCP) Designations

OCP designations are typically accompanied with a map, and set the pattern for development in a community by identifying where certain types of development will occur. Examples of designations include residential, townhouse, high-density apartment, local commercial, neighbourhood commercial, light industrial, parks and recreation, park reserve, institutional and school.

### Zoning and Zoning Bylaws

Zoning bylaws regulate the use, density, siting, size and dimensions of buildings and structures, minimum and maximum parcel sizes, conditions for the provisions of amenities, and may set different standards for works and service. To simplify the number of bylaws, a local government may consolidate other provisions (such as parking space requirements or screening and landscaping) into a Comprehensive Bylaw. Zoning bylaws can also include provisions for amenities and affordable housing. These provisions allow a local government to establish different densities within a zone that will entitle an owner to a higher density in exchange for amenities such as a public square, art, or other public benefit (Ministry of Community Services <http://www.cserv.gov.bc.ca/lgd/planning/zoning.htm>).

### Comprehensive Development Zoning (CD)

There are two zoning types that have been used to achieve greater sustainability in urban developments: comprehensive development (CD) zoning and mixed use zoning.

CD zoning provides flexibility by allowing local governments to tailor developments to site and neighbourhood-specific needs. Each CD zone is unique, and is created through a detailed agreement between the local government and the developer. The use, density and siting regulations are not listed in the CD zone bylaw, but are as described on the landowner's development plans, a copy of which is made a "schedule" to the bylaw. CD zoning is most often used for large sites (WCEL 2001). Note that not all municipalities use or welcome CD Zoning. While Vancouver has used this zoning to effectively increase density under the banner of urban liveability, other municipalities will charge a developer for the creation of a CD zone.

### Mixed Use Zoning

Refers to a mix of housing, civic, commercial, institutional, and other compatible uses in an area. Mixed use zoning encourages smart growth development patterns. Although mixed use is especially applicable near public transportation, it has advantages for other areas as well. Such benefits include the preservation of undeveloped or environmentally sensitive land elsewhere in the community, opportunities for more or different housing, creation of bicycle and pedestrian-friendly destinations, and an enhanced sense of community. Mixed use is not a new idea. Housing above stores was

common in village centres before the advent of zoning, and many traditional town centres pre-date the advent of zoning as well as the advent of the automobile. They feature a tightly clustered mix of stores, houses, local government buildings, and civic uses within walking distance of each other and often near public transportation (Frank, Kavage, Litman 2006).

### **Bylaws**

“A bylaw is a regulation made by a local government council or board and formalized in a document known as a bylaw” (UBCM library). There are two types of bylaws: zoning and regulatory.

New *zoning bylaws* must be consistent with official community plans. Buildings and uses that existed when a zoning bylaw was passed, and do not conform with the bylaw are allowed to continue in existence, subject to restrictions (WCEL 2001). (See previous pages for specific information on zoning bylaws.)

*Regulatory bylaws* can guide how a community grows, how the environment is protected, and can be issue-specific. Examples of regulatory bylaws include: tree-cutting bylaw; watercourse protection bylaw; landscaping and screening bylaws (WCEL 2001).

### **Cluster Development**

A pattern of development in which building units are clustered on a usable part of a site to avoid unbuildable, sensitive portions of the site like wetlands, streams, and their buffers. Zoning bylaws permit cluster development by allowing smaller lot sizes when part of the land is left as open space. Cluster development has a number of distinct advantages over conventional subdivision development. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves natural drainage systems, vegetation, open space, and other significant natural features that help control stormwater runoff and soil erosion.

Cost savings during construction are achieved by a reduction in street lengths and utility installations. Later savings can be realized in street and utility maintenance (less surface area that needs repaving and fewer feet of utility line to maintain). Because dwelling units are placed closer together, refuse and other service vehicles do not have to negotiate over as much street distance, thus reducing travel time. Where clustering is accompanied by the provision of pedestrian pathways and bikeways – especially those that link to off-site activity centres – residents of the cluster development may walk and exercise more. Clustering also enhances the sense of community, allowing parents better supervision of children playing in common areas and promoting social interaction among neighbours (American Planning Association 2006).

### **Infill Development**

Infill is development that occurs on an underused or vacant site within an urban area. Infill development improves city centres by revitalizing urban cores, and increasing the compactness of a community, while leaving rural areas and open spaces undeveloped. Infill development can reduce traffic congestion, save open space, and create more liveable communities. Successful infill development channels economic growth into existing urban and suburban communities and conserves natural resources at the periphery of the metropolis.



### **Brownfield Development**

Development on unused industrial lands that may or may not be contaminated or have been remediated is referred to as brownfield development. Many existing buildings and urban parcels that can accommodate infill development fall under the definition of “brownfield”. Often, these are former industrial or commercial areas, or derelict waterfront sites. If communities encourage development in existing areas (i.e. brownfields) they can reap real benefits including a stronger tax base, closer proximity of jobs and services, taxpayer savings, reduced pressure to build on greenfield sites, and the preservation of agricultural land and open space.

### **Density Bonusing**

Density bonusing is a bargaining tool that can be used by municipalities to negotiate for more amenities or desirable services. This tool allows municipalities to authorize increases in development height and density in exchange for concessions from developers. Concessions can include additional parkland, additional affordable housing, the protection of heritage buildings, and so on. Density increases might include allowing a developer to build more units per hectare, or build higher by allowing for an additional floor on, for example, a business or apartment tower. The maximum density allowed on a site is restricted by a municipality’s official community plan and zoning bylaw. Developers often support density bonusing as it allows them to include more units, thereby reducing per-unit construction costs. Density bonuses have been used to create parks, walkways or open space or to protect environmentally sensitive areas or watercourses.

### **Transfer of Development Rights (TDRs)**

Similar to density bonusing, TDRs are a negotiating tool for local governments. Municipalities use TDRs to authorize higher-density development on one site in exchange for the protection of buildings or natural features on another site (where the same developer owns both sites). This allows a municipality to direct development away from an area requiring protection to an area that may be better suited for development – ideally concentrating development in ways that make for more compact, liveable communities. The downside of TDRs is that the communities receiving the higher density development may not be supportive, nor do they always receive the benefits, as TDRs are often used with protection of sensitive areas in mind, and not necessarily increasing the value of the receiving community.

### **Alternative Development/Low Impact Standards**

Development standards are the regulations, requirements and bylaws by which developments must abide. Alternative development standards are *alternative development requirements* that offer greater flexibility. Alternative development standards (ADS), which are also sometimes referred to as low impact standards in those cases where engineering of water management is the focus, are simply different ways of designing and developing that cost less, are less wasteful, and are more environmentally and culturally friendly. They are often overlooked because they are considered new and un-tested. The use of ADS can be promoted with planning, engineering and parks and recreation departments. Some examples of alternative development standards include:

- *Street pavement widths* – wide streets increase traffic speeds. Reducing street widths or strategically narrowing the pavement, e.g. by using corner buldges, helps calm streets and make them safer for children and adults.

- *Sidewalk requirements* – ensuring that communities are built with sidewalks in place increases the walkability of a local neighbourhood. Specific sidewalk requirements can increase universal access with consideration for the visually impaired, those in wheelchairs, and seniors with limited mobility. Examples of required features: extra wide sidewalks (accommodate two wheelchairs abreast); saw-cut joints (reduce jarring for those in wheelchairs); curb ramps; tinted sidewalks; rest points with wheelchair accessible benches at corners and mid-block points; special landscape features to enhance the pedestrian experience.
- *Stormwater control* – this refers to on-site handling, and permeability of stormwater flow through the use of natural landscaping. It is often combined with parks and open space, boulevards and street corner bulges, and can be used to protect environmentally sensitive areas. Standards for lot coverage by buildings are used to address stormwater control. Bioswales and raingardens are examples of AD Stormwater control strategies.
- *Subdivision standards for open space* – this would include vertical limits set for development on mountain sides. The District of North Vancouver has adopted such standards. These limits are important for many rural communities in mountainous regions of BC. Restricting vertical limits helps protect natural areas.
- *Street connectivity* – streets designed using a grid pattern instead of cul-de-sacs reduce walking distances and increase community connections as people are more likely to interact on street corners. This is particularly important for pedestrians accessing public transit. U.S. research found that pedestrian access to transit was critical – for every 0.25 mile increase in distance from a transit stop to home, the odds of taking transit to work decreased by 16%; for every 0.25 increase in distance from transit stop to work, the likelihood of taking transit to work dropped by 32% (Frank, Kavage, Litman 2006).
- *Setback requirements* – smaller setbacks are desirable. Large set back requirements can make it uneconomical for infill development to occur. Also, large front setbacks in residential areas can reduce the community feel of a neighbourhood. The exception is for areas adjacent to riparian corridors, where large set backs help protect edge habitat and can make room for greenway trail development.
- *Parking* – the LGA allows municipalities to set requirements for on and off-street parking. Reducing parking requirements for transit-oriented locations, and providing opportunities to share parking spaces help create more compact and walkable communities.

### Green Space Protection Tools

There are a range of tools that allow local governments to expand the amount of park space in a community. Under the LGA, local governments can request up to 5% of a development be dedicated park space (either in land or cash-in-lieu). However, by using utility easements, covenants, fee-simple purchase, or eco-gifting, a local government can increase lands set aside for ecosystem protection and public use.

- *Covenants* – legally binding agreements between a landowner and an agency that restrict the use of the land in certain ways but doesn't require the loss of ownership. Agencies can include the Crown or a Crown corporation, a municipality, regional district, local trust committee, or a conservation organization. Covenants are often used to protect heritage buildings, natural features such as trees, or larger tracts of land from development.
- *Fee-simple purchase* – a straightforward purchase of property where the purchaser holds full title to the land. In securing OCP designations such as parkland, local governments will sometimes use a fee-simple purchase. However, high land value in urban areas often necessitates creative acquisition arrangements that may include using a mix of fee-simple purchase, the use of easements and covenants, etc.
- *Ecological gifts (also called 'ecogifts')* – a federal tax program for the donation of ecologically sensitive land to a federally certified recipient such as a municipality, the federal or provincial government, or a not-for-profit organization. Typically best used in rural or remote locations, as urban sites are less likely to qualify as ecologically sensitive. See [www.cws-scf.ec.gc.ca/ecogifts](http://www.cws-scf.ec.gc.ca/ecogifts) for more information.

### Development Permit Areas (DPAs)

Where Official Community Plans designate an area as a Development Permit Area, subdivision, construction and development cannot occur without a development permit. DPAs allow a local government to establish site-specific requirements for development over and above zoning. "When DPAs are designated, the municipality must describe the special site conditions or objectives that justify the designation, and specify guidelines to achieve those objectives. When an owner applies to a local government for a Development Permit to alter the site, the guidelines in the OCP will direct what conditions, if any, are placed on the development" (WCEL 2003).

DPAs can be established in OCPs and zoning bylaws, and can be used to:

- protect the natural environment and local ecosystems
- protect development from hazardous conditions (ex. steep slopes)
- encourage intensive residential development or multi-family residential development (WCEL 2003)

One DPA example is that assigned to steep slopes by the City of Nanaimo, where development restrictions help protect people and ecosystem integrity. Another example is found within the Resort

Municipality of Whistler, where DPAs require new developments to provide access to the Valley Trail System.

### **Crime Prevention Through Environmental Design (CPTED)**

The goal of CPTED (pronounced “sep-ted”) is to enhance the urban environment through design principles that encourage safe behaviour and reduce opportunities for crime to occur. CPTED is a proactive crime prevention strategy utilized by planners, architects, police services, security professionals and everyday users of space. There are four underlying CPTED concepts:

- (1) *Natural Access Control* – the physical guidance of people coming and going from a space by the judicious placement of entrances, exits, fencing landscape and lighting (eg. The use of doors, fences, gates or dense plantings to control access).
- (2) *Natural Surveillance* – the placement of physical features and/or activities, and people in such a way as to maximize natural visibility or observation (eg. Pedestrian friendly sidewalks and streets; front porches; adequate night-time lighting, parking lots visible from windows or doors).
- (3) *Territorial Reinforcement* – define clear borders of controlled space from public to semi-private to private, so that users of an area develop a sense of proprietorship over it (e.g. Clearly indicated public routes; discourage access to private areas by defining property boundaries with landscaping, low fencing or gates).
- (4) *Maintenance* – the care that allows for the continued use of a space for its intended purpose (e.g. a well maintained building or community creates a sense of ownership which helps deter criminals).

CPTED principles can be applied in both existing and new development. For new developments, CPTED reviews can be a standard component of the development permitting process, and development review for rezoning applications (CPTED Ontario).

### **Community Stewardship**

Involves local people taking responsibility for the well-being of the natural landscape, and maintaining healthy communities within a healthy environment. Community stewardship groups may work on initiatives ranging from watershed management and stream enhancement to green streets and community gardens. Stewardship programs are often offered through partnerships between local governments and not-for-profit associations or community groups. Programs invite low impact physical activity, primarily through gardening, restoration plantings, or aquatic monitoring that can accommodate people of diverse abilities, ages and cultural backgrounds. Many programs incorporate a community-building component, or take a community-building approach, resulting in increased social capital in a local neighbourhood. Stewardship programs are not always well-funded and volunteer management is not always sophisticated. The City of Calgary and City of Surrey, however, both offer examples of exceptional stewardship programs.

### **Urban Containment Boundaries**

An Urban Containment Boundary (UCB) is an officially adopted and mapped line that separates developed areas. It shows where urban land ends and the greenbelt (open space including farms, parks and the watershed) begins. UCB's are supported by zoning bylaws and infrastructure policies. They are long-term designations, typically set for 20 years or more. They are intended to discourage real estate speculation and protect natural landscapes at the urban/suburban fringe from sprawling, low density development. UCBs are a growth management tool used to direct growth and promote compact, contiguous urban development. Benefits provided by UCBs include:

- The promotion of urban revitalization;
- Savings on taxpayers' dollars by using public facilities more efficiently;
- Stimulating community development patterns that support more accessible public transit;
- Enabling quick open space retreats from urban centres.

(SmartGrowth BC 2001)

### **Pedestrian-oriented Design Guidelines**

Pedestrian-oriented design guidelines are a compilation of urban design policies and technical guidelines for various neighbourhoods and street types that together, promote pedestrian use. Design guidelines will highlight important considerations for public realm elements such as street trees, sidewalk paving treatment, lighting, placement of street furniture and amenities. Landscape standards can be a component, laying out planting requirements that specifically improve visual, aesthetic and walking appeal. Certain elements or features of pedestrian-oriented design guidelines overlap with ADS, such as the following:

- *Street connectivity* – emphasize grid patterns instead of cul-de-sac patterns in street layouts.
- *Traffic calming* – involves slowing the speed or reducing the volume of traffic on neighbourhood streets to increase safety and livability in the neighbourhood. Traffic calming could include measures such as traffic circles, speed humps, curb bulges, partial diverters, diagonal diverters, right-in-right-out diverters, signs, street closures, and street narrowing.
- *Saw cuts and curb bulges* – for concrete surfaces such as sidewalks, saw cutting is a method of producing clean, even control joints that facilitate the movement of wheeled vehicles, seniors and the visually impaired.

### **Development Checklists**

Creating healthier built environments demands similar planning solutions to those required for sustainable community design, smart growth communities, and for communities looking to reduce their climate change footprint. While a checklist has yet to be developed specifically for healthy built environments, other sustainable development or smart growth checklists can be used and will secure the same, if not all, the benefits achieved when designing for health. Appendix G contains two examples of checklists in use by developers and local governments in BC. The checklists will typically request developers and government staff to assess a development for its ability to provide or respond to:

- Environmental protection;
- Unique neighbourhood design;
- Mixed land uses;
- A range of housing and transportation choices;

- Local economic development.

### **Transportation Demand Management (TDM)**

TDM, also called Mobility Management, includes programs and strategies that encourage transit, walking and cycling, and carpooling. Examples of TDM strategies include the provision of facilities to support biking and walking to work (showers and lockers at workplaces, secure bike lockers); worksite-based programs, financial incentives such as subsidized parking, or disincentives such as parking fees (Frank, Kavage, Litman 2006). TDM best reduces single-occupancy vehicle use, and encourages walking and cycling, when applied in areas with compact communities.

## **Targets and Indicators**

Targets are reference points or desired outcomes that guide the application of a particular tool. Indicators guide and measure progress but do not offer an end point. While some targets are available for various elements of healthy built environments, it is important to note that targets are best set locally, in collaboration with stakeholders, so that they can be tailored to specific community needs and unique landscape characteristics. A “one-size fits all” approach to setting targets can end up with practices that miss the mark in terms of achieving healthy built environments. With that caveat, find below some examples of targets that may be helpful in designing healthier built environments.

**Examples of Healthy Built Environment Targets**

Target	Desired Outcomes
<p>Low impact development targets for stormwater control using natural system design.</p> <p><i>In an urban area, 10% of area covered by impervious surfaces is a threshold at which aquatic diversity and abundance is initially and significantly impacted (WCEL 2001).</i></p>	<p>90% or approximately 1 inch per day of rainfall captured on site.</p> <p>&lt;10% urban area covered by impervious surfaces</p>
<p>Pedestrian-oriented targets:</p>	
<ul style="list-style-type: none"> <li>• Street Connectivity</li> </ul>	<p>Each household to be within 400m of a (multi-functional*) park space *Multi-functional spaces offer active and passive play and recreation; natural plant and animal habitat.</p> <p>Residences to be within a 5 minute walk or 400m to work or transit opportunities.</p> <p>Recommended maximum standard block length 180m (Condon 2002).</p>
<ul style="list-style-type: none"> <li>• Sidewalk widths</li> <li>• Parkway strips to buffer pedestrians from traffic, allow for tree planting</li> <li>• Crosswalks</li> </ul>	<p>1.5m (residential areas) 1.8 – 3.7m (mixed use and commercial areas)</p> <p>1.5 – 3m</p> <p>At mid-block, if block is longer than 90m (Local Government Commission, Tracy 2003)</p>
<ul style="list-style-type: none"> <li>• Narrower road widths to slow traffic while still allowing movement</li> </ul>	<p>Shift from 8.5m standard to 6m (WCEL 2001)</p>
<p>Road and paving targets <i>Automobile-oriented cities devote up to 30% for roads and another 20% for parking</i></p>	<p>Walking-oriented cities = &lt;10% of land devoted to roads and parking (WCEL 2001)</p>
<p>Density to support bus transit</p>	<p>40 people/ha (economically sustainable bus transit system)</p> <p>60 people/ha (self-sustaining bus transit system) (WCEL 2001)</p>
<p>Low parking requirements in compact, residential and transit-oriented neighbourhood</p>	<p>1 per unit with 0.2 increase for every bedroom above the baseline, and 0.2 per unit for visitors (WCEL 2003)</p>

Indicators are less context-specific, and are useful in identifying whether a particular built environment is on the right track in terms of supporting healthier populations. A Healthy Built Environment framework for indicators is currently being produced by PHSA. In the meantime, the following are examples of indicators that Health Professionals may want to consider.

**Walkability:** the distance between residences and work destinations, transit stops, and other basic services. Ideally, no more than a 5 minute walk or 400 meters. This can be calculated using a 280 metre radius “as the crow flies” from destination to home to account for variations in road network connectivity, and topography.

**Overweight:** a BMI of greater than 30 is associated with high health risk. BMI is calculated by dividing weight (in kg) by height (in m).

**Land in protected areas:** areas protected, as a per cent of BC’s land base. This includes parks, ecological reserves, class A and C parks, recreation areas and protected areas that fall under the Environment and Land Use Act.

**Density of housing units:** total number of housing units divided by the municipality’s taxable land-base, minus lands in the Agricultural Land Reserve.

**Perception of safety:** population 15 and over perception of personal safety when waiting for or using public transit alone after dark, when walking alone in a neighbourhood at dark, and when home alone in the evening or at night.

**Water quality:** water quality index – percent of waterbodies rated excellent or good based on a composite index that measures the degree to which the various water uses are protected.

**PM10 and PM2.5:** percentage of monitored communities exposed to health risks from fine particulates for more than 18 days. Data are based on measurements taken at sampling stations at locations throughout the province. PM refers to particulate matter while the number refers to the size of the particulate.

**Child respiratory admissions:** age-standardized rate of hospitalizations per 1,000 among persons 0-14 for respiratory diseases.

**Specialty food stores per 10,000:** one measure of diverse products available in a community.

**Food security – experienced:** % of persons 18+ who indicated that they “sometimes” or “often” worried that there would not be enough food because of a lack of money during the previous 12 months.

**Number of homeless:** number of homeless without a place of their own to stay for 30+ days (point-in-time or annual prevalence) by Census Metropolitan Area (CMA).

**Percentage of owners spending >30% of income on housing:** a measure of housing affordability.

(Indicators provided by Dr. Jorge Cerani, Healthy Built Environment Alliance meeting, March 17, 2008)



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# APPENDICES

# Appendix A: Glossary

## **Accessory Building**

A building that is secondary or minor to the principal use of a site and is detached above grade from a principal building.

## **Accessory Use**

A use that is subordinate or ancillary to the principal use of the site.

## **Accessory Dwelling Unit**

A secondary living unit existing either within the same structure, or on the same lot as the primary dwelling unit. Usually a basement suite put in a house or over a garage.

## **Adjacent Property Owner**

The property owner (listed on the City tax roll) of the land next to the site on which an application is being processed.

## **BC Building Code**

Provides the minimum requirements for a safely built environment. The Code sets out technical provisions for the design and construction of new buildings. It also applies to the alteration, change of use and demolition of existing buildings.

## **Building Envelope**

The proposed building envelope is the “footprint” that any proposed development will encompass after completion. It usually extends 1 metre from actual building walls or overhangs.

## **Building Permit**

A permit issued by a local government to erect a new building or structure or to demolish, relocate, repair, alter or make additions to an existing building or structure.

## **Bylaws**

A regulation adopted by City Council. Bylaws regulate zoning, business licensing, noise control, streets and traffic, signage, etc.

## **Carbon taxes**

A tax on products that emit greenhouse gases, levied in proportion to their content of carbon and other greenhouse gases.

## **Charrette**

A neighbourhood or centre design process where a multidisciplinary team (including residents, business owners, the municipality and design professionals such as architects, engineers, planners and landscape architects) creates a visual plan for an area over the span of several days.

**Condominium**

A building consisting of many living units, which are each owned by individuals. Could be a warehouse, an apartment, townhouse, etc.

**Connectivity**

The directness and availability of alternate routes from one point to another within a street network.

**Curb bulges**

Curb bulges at crosswalks help pedestrians and drivers see each other more easily and make crossing safer by shortening the time pedestrians have to spend in the roadway.

**Density**

The number of land uses or land users on a specified unit of ground. The most commonly used density indicators are dwelling units/hectare (residential) and the ratio of floor space or building area to the site area (commercial).

**Design Guidelines**

Tools used by planners to direct key aspects of the design of buildings and open space. Local governments create design guidelines for a particular development based on policy (i.e. their OCP), and regulate such things as building dimensions, setbacks, facades, building materials, landscaping.

**Development Cost Charges (DCCs)**

DCCs are fees collected from developers by municipalities in order to recover capital costs related to roads, sanitary sewers, water, drainage, and parkland acquisition.

**Development Design Guidelines**

The intent of guidelines is to assist owners and applicants in designing developments and to provide a basis on which City staff evaluate projects for approval.

**Development Permit**

A development permit is a document authorizing the applicant to use or develop property in a particular City in accordance with that municipality's zoning regulations.

**Downzoning**

A change of land use designation that decreases the allowed density or intensity of use.

**Duplex**

A single building containing two dwelling units, each having a separate entrance.

**Dwelling Unit**

A suite used or intended to be used as a domicile by one or more persons and usually containing cooking, living, sleeping and sanitary facilities.

**Ecological Reserve**

Ecological reserves are areas in BC selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. Their main role is to contribute to the maintenance of biological diversity and the protection of genetic materials. Some ecological reserves are open to the public for low impact pursuits like hiking, nature observation and photography, while others are closed.

**Environmentally Sensitive Area (ESA)**

A natural area, which because of its features or characteristics, is environmentally significant and has the potential to remain viable.

**Essential Public Service**

Firehall, police station or similar service.

**Fee-simple purchase**

Fee-simple purchase provides for outright purchase of a property for an appraised value. It conveys full ownership of the property without any obligation to the previous owner.

**Floodplain**

The river channel and adjoining lands indicated that would provide the pathway for flood waters in the event of a flood of a magnitude likely to occur once in one hundred years.

**Floor Area Ratio (FAR)**

The ratio of the gross floor area of a building to the area of the site.

**Green Infrastructure**

The ecological processes, both natural and engineered, that act as the natural infrastructure; the interconnected network of open spaces and natural areas, such as greenways, wetlands, ditches, creeks, green roofs, gardens, working lands, aquifers, parks, forest preserves and native plant vegetation, that naturally manages stormwater, reduces flooding risk and improves water quality.

**Greenfield Development**

Areas where no prior development has taken place. These developments are often located on the edges of growing urban centres, and may include forested areas, farmland, or natural areas threatened by sprawl.

**Health Professionals**

For the purposes of this workshop, Health Professionals (HPs) refers to Environmental Health Officers, Medical Health Officers and Community Engagement staff.

**Infrastructure**

The foundation and facilities that are needed to service communities (i.e. roads, utilities).

**Land Use**

Refers to various factors such as density, land use mix, street connectivity and the quality of the pedestrian environment. These factors may apply at various geographic scales.

**Lifting or Holding Zone Provisions**

Land use and development can be subject to special provisions that require specified changes to services related to a specific property. For example, a provision may stipulate that a property zoned for industrial use can not be rezoned for commercial use unless a local road is widened.

**Park Dedication**

Land a developer gives to the City, at the time of subdivision for park purposes. Under the LGA, dedication should reflect approximately 5% of the land value of the entire subdivision.

**Parking Supply**

Number of parking spaces per building unit or hectare.

**Part Lot Control**

Part lot control is a term used when a property is divided into smaller lots or combined with other lots.

**Pedestrian/Cycling Environment**

Quality of walking and cycling conditions such as sidewalk presence, continuity, separation from vehicular rights of way, and safe crossings.

**Permitted Use**

Uses that are well suited to a particular land use district. Applications relating to permitted uses that fully comply with the zoning bylaw must be approved.

**Property Line**

A legal boundary of an area of land.

**Rezoning**

A change of land use designation, approved at a Public Hearing of City Council.

**Road Right-of-Way (ROW)**



The land used for the roadway, including the sidewalk and boulevard.

### **Site Plan**

A “top-down” drawing of the site on which an application is being made. The site plan should include the proposed and existing buildings, yards, existing trees, utility lines, etc.

### **Street Design and Management**

Scale and design of streets, and how various uses are managed. Traffic calming refers to street design features intended to reduce traffic speeds and volumes.

### **Streetscape**

All the elements that make up the physical environment of a street and define its character. This includes trees, building type, style, setback, etc.

### **Subdivision/Condominium Site Plans**

Site plans provide detailed information about development plans for a specific property. For example, site plans describe the location existing and proposed building, units of parking, property access, public utilities and landscaping details.

### **Transit Accessibility**

Degree to which destinations are accessible by quality public transit.

### **Upzoning**

The process of changing the zoning in an area to allow greater density or intensity of use.

### **Utility Right-of-Way (ROW)**

Land that is used utilities. These right-of-ways are usually shown on the legal plan and registered on the title.

### **Variance**

A modification or waiving of a provision of the zoning bylaw – a residential side yard smaller than four feet, for example.

### **Watershed planning**

Watershed planning encourages multi-disciplinary approaches to dealing with planning and links science and technical reviews to policy development and decision making. Watershed planning contributes to solutions addressing urban sprawl, pollution and contamination. It is largely through watershed planning that creeks and ravines are protected, and in many urban areas these offer the only remaining natural areas for trails. In BC, watershed planning initiatives are watershed specific; there is no over-arching legislation or program that supports extensive watershed planning. For example, the Fraser Basin Council has federal, provincial, local and First Nations representatives who carry out watershed planning activities for the Fraser River basin.

### **Zero Lot Line**

The construction of a building on any of the property lines of a lot (ex. a store built to the sidewalk).

## **Appendix B: Key Agencies in Land Use Planning**

### **APEGBC – Association of Professional Engineers and Geoscientists of BC**

APEGBC is the licensing and regulatory body responsible for BC's more than 24,000 engineers and geoscientists. APEGBC regulates and governs the professions under the authority of the Engineers and Geoscientists Act. Individuals licensed by APEGBC are the only persons permitted by law to undertake, and assume responsibility for, engineering and geoscience projects in the province of BC.

### **BCSLA – British Columbia Society of Landscape Architects**

The mandate of the BCSLA is to foster the development and promotion of Landscape Architecture in the province of BC. The BCSLA is a self-governing professional Society whose objectives include the furtherance and maintenance of proper standards of professional practice in landscape architecture. Landscape architects are design professionals who offer a diverse variety of services including the creation of master plans, detail designs and conceptual plans based on physical and environmental considerations.

### **CIP – Canadian Institute of Planners**

The Canadian Institute of Planners is a national federation that works on behalf of the planning profession and serves as the national voice of Canada's planning community. More than half of the CIP's members are government employees, mainly working for municipal/local planning offices. Another one-third work in private businesses, typically as consultants, developers, or as advisors to lawyers or corporations.

### **LGMA – Local Government Management Association**

The Local Government Management Association of BC is a professional organization representing municipal and regional district managers, administrators, clerks, treasurers and other local government officials in the Province. The Association is dedicated to promoting professional management and leadership excellence in local government and to creating awareness of the local government officers' role in the community. There are currently six regional chapters across BC.

### **PIBC – Planning Institute of British Columbia**

The Planning Institute of BC is an association of professional planners in BC and the Yukon. PIBC is an affiliate of the Canadian Institute of Planners. PIBC members work in the public service and the private sector in a wide variety of fields including land use planning, environmental resource management, land development, heritage conservation, social planning, transportation planning and economic development.

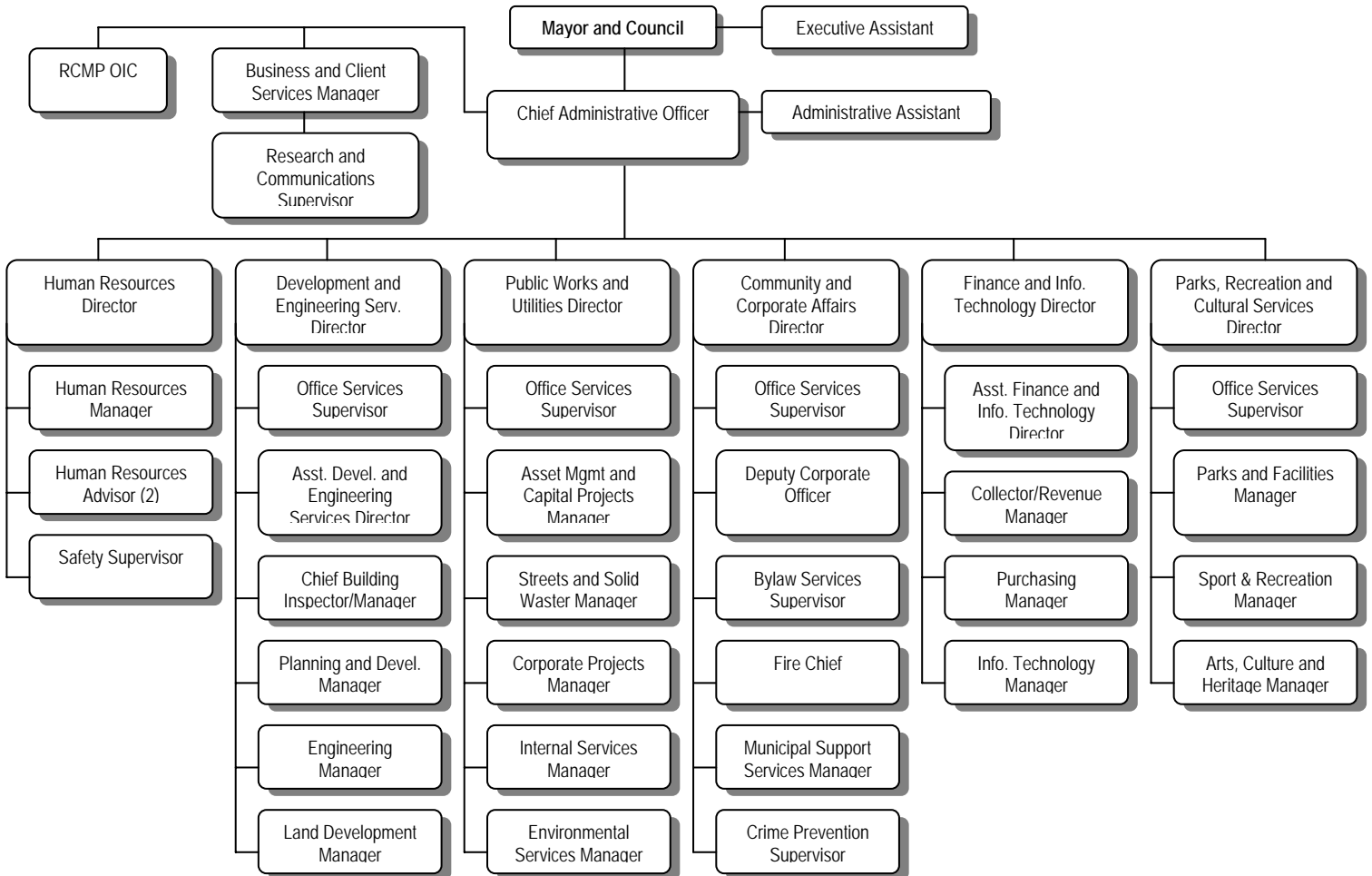
### **UBCM – Union of British Columbia Municipalities**

The UBCM has served and represented the interests of local governments in BC since 1905. The UBCM was formed to provide a common voice for local government. The UBCM Convention is a major forum for UBCM policy-making. It provides an opportunity for local governments of all sizes and from all areas of the province to come together, share their experiences and take a united position.

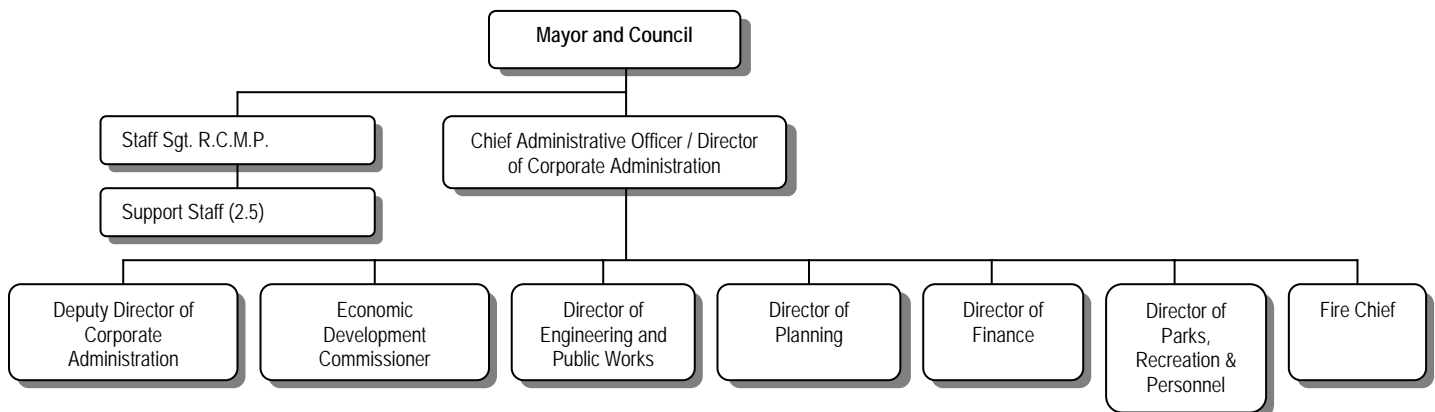
**UDI – Urban Development Institute**

The UDI is a national non-profit association of the development industry and its related professions. Members of UDI Pacific represent all facets of land development and planning including developers, property managers, financial lenders, lawyers, engineers, planners, architects, appraisers, real estate professionals, local governments and government agencies. UDI concentrates its activities in three primary areas: government relations, professional development and education, and research. The UDI is dedicated to fostering effective communication between the industry, government, and the public.

# Appendix C: Examples of Local Government Structures



Adapted from City of Kamloops, 2008



Adapted from City of Revelstoke, 2008

## Appendix D: Sample Supporting Policies

The following provides some examples of policies that support healthy built environments. These policies can be found within OCPs or within Local Area Plans. Remember that it is in the layering of mutually-reinforcing policies that best gains can be made in creating healthier urban environments – no one policy alone can do the trick.

Many of these example policies have been sourced from West Coast Environmental Law's on-line Smart Bylaws Guide: <http://www.wcel.org/issues/urban/sbg/bylaws/>

### Infill Development

Policies and bylaws for small lots are key to supporting infill development. The City of Victoria has adopted a small lot rezoning policy that supports infill development in the city (*see next page*).

Excerpted from:

*Small Lot House*, City of Victoria, 2002 [http://www.victoria.ca/common/pdfs/planning\\_smalllot.pdf](http://www.victoria.ca/common/pdfs/planning_smalllot.pdf)

## SMALL LOT HOUSE REZONING POLICY

### INTRODUCTION

A "Small Lot House" refers to a minimum lot size of 260m<sup>2</sup> and a minimum width of 10m. The size of house permitted in this zone is also smaller, with a range of 160m<sup>2</sup> to 190m<sup>2</sup>. By comparison, more conventional house lots for Victoria have been, on average, 460m<sup>2</sup> with a 15m width and a house size limit for first and second floors of 280m<sup>2</sup>. Small lot zones have the same site coverage standards as conventional zoning.

Victoria already has the distinction of being one of Canada's least affordable cities. Within the next generation, the region's supply of land for single family dwellings will be greatly reduced, resulting in even greater pressures on price as well as on the region's rural open space reserves.

### A. GOALS & OBJECTIVES

#### 1. GRADUAL CHANGE

- 1.1 Support growth through small, adaptive and gradual change.

#### 2. HEALTHY ECONOMY

- 2.1 Revitalize neighbourhoods by allowing new infill construction.
- 2.2 Make (optimal) use of neighbourhood infrastructure (schools, water and sewer).

#### 3. CHOICE

- 3.1 Increase the quantity of detached dwelling lots while providing other options.
- 3.2 Meet changing needs, wants and values of existing and future residents throughout the life cycle (e.g., the need for ground-oriented housing for families with children, the desire for smaller houses and yards for seniors, couples, empty nesters or singles).

#### 4. SENSITIVE TO NEIGHBOURS' VALUES

- 4.1 Consult neighbours and the neighbourhood association before embarking on a process for rezoning and/or a change to an approved development permit.
- 4.2 Use 'good neighbour' design approach in relation to privacy, landscaping, sunlight, view and parking, e.g., in cases where neighbouring structures are sited very close to the lot line, provide more generous side setbacks.

### B. STRATEGIES

#### 1. CONSERVATION

- 1.1 Small lot rezoning is not intended to facilitate the demolition of an existing house to enable additional houses to be built in the same place, unless there are exceptional circumstances and these are also justifiable before the neighbours and the neighbourhood association.
- 1.2 Care should be taken to conserve heritage features and trees, particularly those species recognized in the tree protection program.

#### 2. LOCATION

- 2.1 A small lot can benefit from adjacent public open space, e.g., that afforded by a street right-of-way. Double frontage lots and corner lots are preferable to interior lots.
- 2.2 Panhandle lots generally will not be considered in the small lot zone unless issues such as rear yard privacy, street views to heritage facades, vistas, sunlight, shadow, green space and tree conservation issues are adequately addressed. Where panhandle lots are considered, it is expected that the "small lot" property will occupy the street frontage and the resulting panhandle lot will remain in the R1-A or R1-B zone and satisfy those larger lot zoning standards.

#### 3. HEIGHT

- 3.1 In determining whether to apply for the one or two storey class of small lot zoning, the applicant should consider the shadowing, privacy, sunlight and air space impact of the new building on neighbours. This will differ depending on topography, orientation, siting and seasonal sun angles as well as the characteristics of neighbouring properties.

#### 4. PRE-APPLICATION CONSULTATION REQUIREMENTS

Before formalizing a rezoning application, the following actions are required of the applicant:

- 4.1 A review to see if the City's plan policies for the site support small lot housing (contact the area planner, and review the local neighbourhood plan and *Official Community Plan*).

**SMALL LOT HOUSE REZONING POLICY**

- 4.2 A discussion with City's subdivision technician to review technical issues, e.g., in terms of serviceability, is advisable.
- 4.3 Secure a conditional preliminary subdivision approval from the City's Approving Officer.
- 4.4 Recognizing the impact of this type of application, all residents and owners of neighbouring lots\* must be polled by the applicant as to the acceptability of the application with the results mapped and submitted as part of the site plan information. Neighbours would be asked to indicate their written support (or opposition) for the applicant's design plans. Where an unsatisfactory level of support is evident\*\*, a neighbourhood-shared decision making process will be required indicating a substantial consensus as a precondition of advancing to a public hearing.

Note: The neighbourhood-shared decision making process would be developed in consultation with the Community Association Network and Urban Development Institute; costs would be born by the applicant.

Prior to finalizing an application, the applicant should discuss the proposal with the local neighbourhood association.

**5. DESIGN**

- 5.1 All small lot house sites that go through rezoning become subject to a special design control mechanism called Development Permit Area 26. The exterior design of the house and its landscaping, as well as any subsequent amendment, are subject to the design guidelines (cited in the *Official Community Plan*) and City Council's approval for the required Development Permit.

**6. DESIGN AMENDMENTS**

- 6.1 Once a Development Permit is approved, amendments for major changes will be subject to consultation requirements in Section 4.4 (above). Professional design advice is helpful both in the initial evaluation of the property and throughout the process.

- 6.2 To promote a consultative approach and streamline the approvals process, where residents and owners of all neighbouring lots\* consent in writing to an amended design, the application may be approved administratively without reference to City Council. All other amendments would be referred to Council.

\* "Neighbouring lots" means all properties with at least one point in common with the property for which an amendment application is sought, with property lines deemed to be the centre line of streets and lanes.

\*\* "Satisfactory support" is considered to be support in writing for the project by 75% of the neighbouring lots. A lot is considered to be "in support" if its owners and residents are prepared to indicate their formal approval. For example, in a case involving 8 neighbours, the active support of 6 would be deemed satisfactory while support from 5 or less would be unsatisfactory.





## Protect Open Space and Provide Natural/Recreational Amenities

The District of Ucluelet responded to calls from the community to extend access to a waterfront public trail and for this access to be a requirement for any new waterfront development in the district. Previous policy required new development to provide for 20% public access. The District of Ucluelet now requires new development to provide 100% public access to the waterfront, where feasible. The waterfront amenity, called the Wild Pacific Trail, hosts runners, walkers, and cyclists. The policy requirement is reflected in the OCP under Parks and Open Space policies and in the OCP's Development Permit Areas guidelines.

### *Part III – The Plan*

#### *5. Parks and Open Space policies:*

1. Develop an open space network consisting of:
2. Neighbourhood parks (with minor facilities);
3. Community parks (with extensive facilities);
4. Nature Parks (with or without trails);
5. Linear Parks (with walkways and bikeways);
6. Greenbelts.
7. Connect the above elements with the Village Square and the waterfront to form an integrated open space system.
8. Create a parkland DCC component within the review of the DCC bylaw.
9. Develop a waterfront promenade beginning at the Village Square.
10. Encourage the dedication of a minimum 7.5 metre wide leave strip as parkland from properties subdividing or developing along the marine waterfront (or 15-30 metres from natural water courses) identified as environmentally sensitive areas (ESA's) and considered suitable for preservation or rehabilitation, unless otherwise stated within an environmental impact assessment report.

### *Part IV Implementation – Development Permit Area Guidelines*

2.10 The following requirements pertain to all the Development Permit Areas:

- m) Maintain and create 100% of the Wild Pacific Trail along the coastline, where feasible on properties located along the waterfront.

*- District of Ucluelet, Official Community Plan, 2007*



## Protect Agricultural Lands/ Channel Development

Kelowna has included a set of Growth Management policies in their OCP (updated 2006) designed to channel urban growth into existing developed areas, while protecting their agricultural lands. The policies specifically address, among others, mixed use, multiple units on site, compact form, the protection of sensitive landscape features, TDM. Two example policies are presented below.

*5.1.3 New Rural Residential Zone.* Initiate an amendment to the Zoning Bylaw to create a new Rural Residential Zone, with a minimum parcel size of 4.0 ha (10 acres), which would apply to all properties within the Future Urban Reserve designation and to non-ALR properties within the Rural / Agricultural designation of the OCP that are currently 4.0 ha or more in size;

*5.1.7 Minimize Impact on Agricultural Lands.* Support the Agricultural Land Reserve and establish a defined urban-rural/agricultural boundary, as indicated on Map 11.2 - Urban -Rural/Agricultural Boundary, utilizing existing roads, topographic features, or watercourses wherever possible. The City will direct urban uses to land within the urban portion of the defined urban-rural/agricultural boundary, in the interest of reducing development and speculative pressure, toward the preservation of agricultural lands. The City will discourage further extension of existing urban areas into agricultural lands.

- *City of Kelowna, Official Community Plan, Updated 2006, Chapter 5*

## Environmental Health – Water and Air Quality

Local governments are beginning to use a new model called the Water Balance Model to guide them in creating urban infrastructure that works *with* natural systems. In using this approach, local governments not only secure water quality while reducing the environmental impact of municipal infrastructure, they are also creating or retaining natural landscapes that add to the visual and experiential aesthetic of neighbourhoods and in some cases, provide additional air quality benefits.

Courtenay is one such municipality.

### *4.10.5 Water Balance Model*

The City is a member of the Water Balance Model of BC. This Model promotes a watershed-based approach that manages the natural environment and the built environment as integrated components of the same watershed. The focus is on how to design and build residential communities and industrial/commercial developments that reduce stormwater runoff volumes and function hydro-logically as though still forested. This will lead to the application of development practices which will lower the costs and maximize the benefits to landowners, while providing increased protection to the environment.

The Model assists the City to integrate land use planning with volume-based analysis of stormwater management practices. These strategies will include returning rainfall to the ground using filtration facilities, using soils and vegetation to retain stormwater, and managing rainwater for re-use within the development.

1. The City will require a minimum depth of 300 mm of topsoil or amended organic soil on all landscaped areas, lawns and groundcover, a depth of 450 mm for shrubs and 300 mm around and below the root ball of all trees of a property. This will also be required in all new subdivisions.
2. The City will implement the Water Balance Model of BC to manage the natural environment and the built environment as integrated components of the same watershed.

*- City of Courtenay, OCP 2007, Section 4.10.5*

## Transit-Oriented Development (TOD)

Transit-oriented Development intensifies land use along transit corridors. Creating higher density, mixed use development in these areas makes sense, as this takes advantage of existing commercial and public transportation services. Coquitlam has adopted a policy in the OCP to support TODs.

### *2.3.1 Transit-Oriented Development (p.2-8)*

#### Objective:

To develop Transit-Oriented Commercial Village Centres that offer multi-modal transportation choices featuring transit-, pedestrian-, and bicycle-friendly street design, but also accommodate vehicular access.

#### Policies:

- a. Create a distinct Village Centre featuring a multi-modal transportation hub and strong civic identity through urban parks and squares.
- b. Provide an interconnected street network throughout the neighbourhood to facilitate ease of walking and cycling and to enable a more efficient use of infrastructure.
- c. Achieve tree-lined, safe pedestrian-friendly streets (i.e., buildings close to the street with windows, doors and porches of commercial, institutional, and residential uses oriented towards the street).
- d. Provide compact development that contains a range of uses at medium to high densities within a ten-minute walk or a 400-metre radius from the multi-modal transit hub.

*- City of Coquitlam, OCP 2002 BYLAW 3498*

# Appendix E: Sample Zoning Bylaw

Port Alberni Downtown Core, Zoning Bylaw 1998, No. 4395

This zoning bylaw is an example of how compact, complete communities can be created using density bonusing and mixed use zoning. The *Northport Downtown Core* Commercial District in Port Alberni allows additional density for mixed use developments (residential-commercial). The maximum height may be increased from four stories to six as long as certain conditions are met, which include providing 75% of required parking underground, an amenity room, designating 10% of the units as accessible suites, and 10% of the units as affordable.” (WCEL, <http://www.wcel.org/issues/urban/sbg/Part3/compact/densitybonus/PortAlberni.htm>)

## 6.23 CMX1 - NORTHPORT DOWNTOWN CORE DISTRICT

### 6.23.1 General Purpose

To establish and maintain a vibrant and healthy mixed use area in the Northport downtown core with attention to providing goods and services to the travelling public and tourists.

### 6.23.2 Permitted Uses

Accessory Buildings and Uses  
 Animal Grooming Facilities  
 Antique Stores  
 Art Galleries  
 Automotive Supply Stores  
 Bakeries  
 Banks and other Financial Institutions  
 Business Management Services  
 Clubs and Lodges  
 Computer and Electronic Stores including repairs  
 Convenience Stores  
 Daycare Facilities  
 Dentists Offices  
 Department Stores  
 Drugstores  
 Dry Cleaners, Laundries and Pressers  
 Engineers, Architects or Planners Offices  
 Facilities for Charitable, Philanthropic, Fraternal or Religious Organizations  
 Financial Services Offices  
 Fitness Centres  
 Food Stores  
 Gasoline Service Stations  
 General Service Offices  
 Hostels, Hotels and Motor Hotels  
 Household Appliance and Furniture Stores

Insurance Offices  
Lawyers and Notaries Offices  
Liquor, Wine and Beer Stores  
Medical Clinics  
Motor Vehicle Dealers  
Motor Vehicle Repair Shops  
Multiple Family Dwellings  
Music and Dance Recital Studios  
Musicians Studios  
New and Used Book Stores  
New and Used Apparel and Shoe Stores  
Nightclubs, Cabarets, Bars and Pubs  
One or Two Dwelling Units above a Commercial Use  
Other Health Services  
Paramedical Services Offices  
Parking Lots  
Personal Care Facilities  
Personal Services Shops  
Photographic Services  
Physicians and Surgeons Offices  
Places of Worship  
Post Offices  
Public Transportation Depot  
Publishing and Allied Industries  
Radio, Television and Appliance Repair Shops  
Real Estate Offices  
Restaurants but excluding Drive-In, Drive-Thru and Take-Out  
Retail Stores  
Self-service Laundries  
Senior Citizen Housing  
Shoe Repair Shops  
Taxicab Dispatch Offices  
Tourist Services  
Video Rental Stores  
Home Occupations  
Tutoring Service  
Bus Terminals  
Car Washes

**6.23.3 Bulk and Site Regulations**

Minimum Lot Area 540 m<sup>2</sup> (5812.7 ft<sup>2</sup>)  
Minimum Frontage 15 m (49.2 ft)  
Maximum Coverage 90%  
Minimum Setbacks: Front Yard 0 m, Rear Yard 3 m (9.8 ft), Side Yard 0 m  
Maximum Building Height 14 m (45.9 ft)  
Maximum Number of Principal Building Storey 4  
Maximum Floor Area Ratio: 3.0

**6.23.4 Conditions of Use**

Notwithstanding the provisions of 6.23.3,

**(i) General Provisions**

- a) All business activity shall be conducted within a completely enclosed building, except for patios associated with restaurants and the like, display facilities, activities normally done at a gasoline pump and parking and loading facilities.
- b) Residential uses shall be located above the first storey, except as provided in (e).
- c) A shared public access to any residential dwelling units shall be provided separate from any other use from ground floor entrance.
- d) Each residential suite shall have a private balcony not less than 5 m<sup>2</sup> (53.8 ft<sup>2</sup>) in area and with no dimension less than 1.5 m (4.9 ft).
- e) Where multiple family dwelling units are located below the second storey, the Bulk and Site Regulations of the RM3 Higher Density Residential District shall apply.
- f) Notwithstanding any other provision of this Bylaw, one parking space shall be provided for every residential dwelling unit.

**(ii) Density Bonus for Mixed-Use Residential-Commercial Developments**

The maximum height permitted may be increased up to six (6) storeys and up to 18 m (60 ft), and the maximum floor area ratio permitted may be increased up to 3.5 from that indicated in 6.23.3 where:

- a) A minimum of one storey or sixteen one-half percent (16.5%) of the gross floor area of the building is used for commercial purposes;
- b) Greater than seventy-five percent (75%) of the required parking is provided underground or enclosed underneath the principle building;
- c) Elevators are provided to all storeys in the building;
- d) A minimum of ten percent (10%) of the dwelling units are designed as accessible;
- e) A minimum of ten percent (10%) of the dwelling units are designated as affordable, as specified in a Housing Agreement and where the owners enter into a Housing Agreement with the City, and where this Agreement is filed with the Land Title Office; and
- f) A common meeting room or amenity room containing a minimum of 22 m<sup>2</sup> (235 ft<sup>2</sup>) is provided

*- Port Alberni Downtown Core, Zoning Bylaw 1998, No. 4395*

# Appendix F: Sample Development Application Form

## THE CORPORATION OF THE CITY OF CRANBROOK

### APPLICATION FOR DEVELOPMENT PERMIT

This application form is to be completed **in full** by the registered owner of the land or by the authorized agent acting on behalf thereof. PLEASE PRINT

#### TYPE OF DEVELOPMENT PERMIT BEING APPLIED FOR:

Joseph Creek    Commercial    Multi Family Residential

Aquifer Protection    Highway Commercial    Baker Hill Heritage

Steep Slopes    Downtown Commercial    Industrial

Wildfire    Neighbourhood Commercial    Variance

#### APPLICANT: Registered Owners

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email Address: \_\_\_\_\_

Authorized Agent (acting on behalf of owner) (**attached written Authority of Owners**)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email Address: \_\_\_\_\_

#### PROPERTY:

Legal Land Description: Lot \_\_\_\_\_ Plan \_\_\_\_\_ District Lot \_\_\_\_\_ K.D.

Civic Address: \_\_\_\_\_ Cranbrook, BC

Parcel Identifier Number: \_\_\_\_\_

Property Size: \_\_\_\_\_ (Dimension/Area of Parcel)

**LAND USE:** OCP Land Use Designation \_\_\_\_\_

Present Zoning: \_\_\_\_\_ Page 2 of 2 Development application form February, 2008

**THESE ITEMS MUST ACCOMPANY THE APPLICATION**

**Full Details On The Existing Development** – describe all of the existing uses and development of the property; describe in detail the proposed development. If applying for a variance indicate the section of the zoning bylaw for which the variance is being requested and provide full justifications for the requested variance.

**Submission of plans** including but not limited to existing site plan, proposed site plan, servicing plan landscape plan, building floor plans, full elevations of all sides of the building, and sections. Plans should be clear, professionally drafted, drawn to scale and properly dimensioned.

**Legal Survey Certificate** may be required to confirm parcel dimensions, shape, size and location of all built structures and improvements. The survey shall be undertaken by a registered BC Surveyor.

**Miscellaneous Information.** Any other information deemed necessary by the City. The applicant is advised to discuss the proposed application with city Staff prior to making application to determine what additional information is required. Note: the City reserves the right to request additional information once they have reviewed the application.

**Associated Applications have been submitted** if required  
ALR Application (Agricultural Land Commission)

Site Profile (Ministry of Environment)  
Controlled Access Permit (Ministry of Transportation)  
Other \_\_\_\_\_

**Written Authority of Owners** if required

**Current Certificate of Title** dated no more the 30 days prior to date of application

**Land owned by numbered companies.** If the owner of the land is registered as a numbered company, the names of the principals of the numbered company shall be supplied.

**Application Fees** Total Provided \_\_\_\_\_  
Development Permit \$200

Development Variance Permit \$400

Site Profile \$100 if required

Technical documentation may be required to provide support for the proposed amendment. The land owner in the process of submitting this application hereby recognizes and accepts that this material will become available to the public as part of the application, review and approval process.

\_\_\_\_\_  
Land Owner's Initials

\_\_\_\_\_  
Owner/Agent Name Signature of Applicant Date

**Office Use Only**

Date Received \_\_\_\_\_ Date Deemed Complete \_\_\_\_\_ File No: \_\_\_\_\_  
City Official \_\_\_\_\_



# Appendix G: Sustainability Checklists



## SUSTAINABILITY CHECKLIST REZONING AND DEVELOPMENT PERMIT APPLICATIONS

	Points	Wt	Total	Soc	Env	Eco
<b>1. Land Use</b>						
<ul style="list-style-type: none"> <li>Mix of uses provided or uses consistent with OCP</li> <li>Adds to the diversity of uses within an existing neighbourhood, such as employment, housing, retail, civic, educational, cultural, recreational</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5	(50%)		(50%)
<b>2. Housing</b>						
<ul style="list-style-type: none"> <li>Offers or adds a mix of housing types, sizes and tenure, including special needs<sup>1</sup></li> <li>Provides units with a wide-range of pricing options that will be sold or leased</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	2	/10	(50%)		(50%)
<ul style="list-style-type: none"> <li>Provides subsidized or rental housing<sup>2</sup></li> </ul>	No - 0 Yes - 5	1	/5	(50%)		(50%)
<b>3. Community character and design</b>						
<b>a) Design</b> <ul style="list-style-type: none"> <li>Building design follows required architectural style and demonstrates innovation</li> <li>Building orientation towards open space, views and/or daylight</li> <li>Treatment of façade breaks down massing and articulates depth, verticality &amp; street edge</li> <li>Scale and massing of buildings relate to neighbourhood structures</li> <li>Provides crime prevention through environmental design</li> <li>Incorporates enhanced durability/longevity of construction materials.</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	2	/10	(50%)		(50%)
<b>b) Public Space</b> <ul style="list-style-type: none"> <li>Creates or enhances community spaces, such as plazas, squares, parks &amp; streets</li> <li>Strong connections to adjacent natural features, parks and open space</li> <li>Builds or improves pedestrian amenities, such as sidewalks, transit shelters, bike racks and connections to civic, cultural, school and retail/service uses</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	2	/10	(50%)		(50%)
<b>c) Density &amp; Infill</b> <ul style="list-style-type: none"> <li>Maximizes FAR or dwelling unit/acre density<sup>1</sup></li> <li>Results in infill/redevelopment and enhanced community fabric<sup>2</sup></li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5	(50%)		(50%)
<b>d) Transportation</b> <ul style="list-style-type: none"> <li>Accessible by multiple modes of transport, emphasizing public transit including future planned</li> <li>Parking does not visually dominate the street view &amp; allows easy, safe pedestrian building access</li> <li>Interconnected road system with direct street connections, short block lengths, no cul-de-sacs</li> <li>Provides traffic speed &amp; demand management</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5	(50%)		(50%)

	Points	Wt	Total	Soc	Env	Eco
<b>4. Environmental Protection &amp; Enhancement</b>						
<b>a) Lands</b> <ul style="list-style-type: none"> <li>Does not intrude on ALR or designated open lands</li> <li>Protects riparian areas and other designated environmentally sensitive areas</li> <li>Provides for native species habitat restoration/improvement</li> <li>Redevelops environmentally contaminated site</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	2	/10			
<b>b) Servicing</b> <ul style="list-style-type: none"> <li>Does not require extension of existing municipal infrastructure (e.g. roads, water and sewer)</li> <li>Located in existing commercial and transportation nodes</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5			
<b>c) Construction/Design</b> <ul style="list-style-type: none"> <li>Provides LEED certification (certified, silver, gold, platinum) or accepted green building best practices (e.g. Built Green BC, Green Globes)<sup>3</sup></li> </ul>	None - 0 Certified - 2 Silver - 3 Gold - 4 Platinum - 5	4	/20			
<b>5. Social Equity</b>						
<ul style="list-style-type: none"> <li>Contains elements of community pride and local character, such as public art</li> <li>Provides affordable space for needed community services</li> <li>Conducts public consultation, including documenting concerns &amp; providing project visuals</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	2	/10			
<b>6. Economic Development</b>						
<b>a) Employment</b> <ul style="list-style-type: none"> <li>Provides permanent employment opportunities<sup>1</sup></li> <li>Increases community opportunities for training, education, entertainment or recreation</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5			
<b>b) Diversification and Enhancement</b> <ul style="list-style-type: none"> <li>Net increase to property tax base<sup>1</sup></li> <li>Promotes diversification of the local economy via business type and size</li> <li>Improves opportunities for new and existing businesses, including eco-industrial and value-added</li> <li>Developer demonstrates experience with similar projects</li> </ul>	None - 0 Poor - 1 Good - 2 to 3 Excellent - 4 to 5	1	/5			
<b>Social/Environmental/Economic</b>				/35 ( %)	/35 ( %)	/35 ( %)
<b>TRIPLE BOTTOM LINE SUMMARY</b>				<b>Application Total</b>		
				/105 ( %)		

Per the instructions, please provide statistical data for these indicators, such as floor area ratio, estimated number of employees, number of housing types, sizes and tenures.

Subsidized Housing encompasses all types of housing for which some type of subsidy or rental assistance is provided, including public, non-profit and co-operative housing, as well as rent supplements for people living in private market housing. It also includes emergency housing and short-term shelters.

Enhanced community fabric includes multiculturalism, mobility accessibility, integration with neighbourhoods and crime prevention through environmental design.

Please provide a copy of the green building checklist chosen. For example: LEED Canada-NC 1.0 Project Checklist can be obtained at: <http://www.cagbc.org/uploads/LEED%20Canada-NC%20Project%20Checklist.xls>  
Green Globes at: [http://www.greenglobes.com/design/Green\\_Globes\\_Design\\_Summary.pdf](http://www.greenglobes.com/design/Green_Globes_Design_Summary.pdf)



## Smart Growth Evaluation Framework

1	Land Use	What are you doing ...
a	<p>Describe the mix of uses within the project (types of use, amount and location of each use).            How does the proposal compliment diverse uses within neighbourhood? (residential, retail, office, cultural, educational, civic, recreational), and how will it fit in to the neighbourhood)?</p>	
b	<p>How does the proposed density meets Downtown Concept Plan goals (density of each use, proximity to trail and transit)?</p>	<p><b>Please fill in for applications proposing residential</b></p>
c	<p>How is the proposal consistent with the Official Community Plan, Growth Management Strategy?</p>	
d	<p>Does your proposal use land responsibly? Describe how.</p>	



2	Economic Development	What are you doing ...
a	How does your project encourage job density? (making the most out of available space for employment)	
b	How does your project facilitate investment in strategic sectors identified in the Squamish Trade and Investment Strategy? (manufacturing, tourism, education, alternative energies, waterfront, downtown, wood products, agriculture, and knowledge-based industries)	
c	How can your project help retain and expand existing local businesses?	
d	How many opportunities for permanent employment (number and type of jobs, income range, full/part-time) would result from your proposal?	
e	How does your proposal reduce the need for Squamish residents to commute (e.g. to lower mainland, Whistler, etc.) for jobs?	

f	How does your proposal promote or drive diversification of the local economy (type of business and its size if relevant)?	
3	<b>Natural Environment</b>	<b>What are you doing ...</b>
a	How will your project enhance ecosystem functions (marine, wetland, other aquatic, riparian, upland), protect environmentally sensitive areas (marine, wetland, other aquatic, riparian, upland, and discuss specific feature e.g. nesting habitat, endangered species)?	
b	How will your project use and enhance green infrastructure (trees, green roof, permeable paving, rainwater infiltration, water efficient landscaping, water use reduction)?	
c	Will your project seek to achieve green building standards (e.g. LEED, Built Green BC)? Explain green features of the site and building.	
d	Will your waste and recycling areas and receptacles be wildlife proof, and provide opportunity for efficient sorting and collection?	

4	<p style="text-align: center;"><b>Transportation</b></p>	<p style="text-align: center;"><b>What are you doing ...</b></p>
a	<p>How will your project contribute to and link to the community's infrastructure that helps us to get around without cars (e.g. greenways, connections and crossings to trails and pathways, new trails and pathways)?</p>	
b	<p>How will your project minimize the need for new parking? Is the required parking hidden under or behind the buildings?</p>	
c	<p>How will your project be designed to support alternative transportation (less reliance on cars) with on site amenities, density, layout, etc?</p>	
5	<p style="text-align: center;"><b>Housing</b></p>	<p style="text-align: center;"><b>What are you doing ...</b></p>
a	<p>How will your proposal contribute to a mix of housing types in Squamish? (different selling prices, tenures, forms)</p>	<p><b>Please fill in for applications proposing residential</b></p>
b	<p>The District has goals for no net loss of affordable housing. How does your proposal address this goal?</p>	<p><b>Please fill in for applications involving residential</b></p>

c	How does your proposal result in a diversity of housing for a range of residents (e.g. accessible and adaptable units, universal design, flexible)?	<b>Please fill in for applications proposing residential</b>
d	How will your proposal affect housing affordability?	<b>Please fill in for applications proposing residential</b>
<b>6</b>	<b>Community Design</b>	<b>What are you doing ...</b>
a	How will your project provide and enhance public space (pedestrian walkways, streets, parks, plazas)?	
b	How does your proposal interact with the streets, contribute to the neighbourhood context and adjacent public space? (e.g. buildings open to street in many places, buildings oriented to adjacent parks, façade has depth and street edge and massing is diversified, enlivens the street, uses crime prevention through environmental design, eliminates visible surface parking)	
c	How would the public realm be affected by your proposal? How will you maintain and celebrate views of natural Squamish features from public places, and/or create new view opportunities?	

d	How will your project enhance adaptability and accessibility of publicly accessible and common areas?	
e	How does your project enhance authentic Squamish identity and character (including architecture, design, colours, materials, landscaping, historical elements, naming)?	
<b>7</b>	<b>Community Process</b>	<b>What are you doing...</b>
a	What's your plan for meaningfully and appropriately engaging the community and its interests?	



## Appendix H: Resource List

Active Living by Design – Robert Wood Johnson Foundation <http://www.activelivingbydesign.org/>

Farr, Douglas *Sustainable Urbanism – Urban design with nature*. Hoboken, New Jersey: John Wiley & Sons, Inc. 2008.

Federation of Canadian Municipalities – *Active Cities: An Opportunity for Leadership*, 2005.  
<http://www.fcm.ca/english/documents/activecities.pdf>

SmartGrowth BC – *Smart Growth Tool Kit*, 2001.  
<http://www.smartgrowth.bc.ca/Default.aspx?tabid=159>

UBCM Library – Fact Sheet Series. <http://ubcm.ihostez.com/contentengine/launch.asp?ID=894>

West Coast Environmental Law *BC Guide to Watershed Law and Planning*.  
<http://www.wcel.org/issues/water/bcgwlp/>

West Coast Environmental Law *Smart Bylaws Guide* 2004 – updated 2008.  
<http://www.wcel.org/issues/urban/sbg/>